

Converse County EAs Comment Response and Errata

Comment #	Organization/ Commenter	Comment	BLM Response	Document
PC-1	Private Citizen	Please allow permitting for wells in question and get the drilling started as soon a[s] possible.	Thank you for your comment.	Non-specific
PC-2	Private Citizen	<p>I'm living in the Clear View Acres subdivision, in Converse County. I moved here with the idea of building a home by my niece and her family on Clear View Road. The land overlooks the town of Douglas, with the wonderful mountains behind. It has a beautiful view of the sunsets and town lights. Now the views are being ruined by wells and flare tubes.</p> <p>I'm afraid if I build here, I would have to deal with the roar of the wells day and night. With all the wells going in the traffic and dust increases more and more. The possibilities of another blow out have increased, and the air quality is being affected. When I drive by the existing well the heat and roar are obnoxious. Every time I go to town it is necessary to pass at least one flare tube. I have seen the stakes for 4 more well sites that will be going in within a couple of miles of my home.</p> <p>The flares have been noisy, it is like living on the tarmac of the Denver airport. It is disruptful for the wildlife and livestock, not to mention the sage grouse. The flares put out hydrocarbons that have killed gardens in my neighborhood. The oil companies have been going so fast and not fixing problems that have been created, it is hard to imagine what it will be like with more wells and activity.</p> <p>Can they produce these wells without a flare tube and use the gas instead? Is there any way to avoid the roar and air pollution? Is it wise to be allowing these wells to be drilled so fast, knowing that there may be problems with the gases, and no plans in place to deal with the gases? It seems the wells are being drilled without much thought to infrastructure or safety of the people living here. I understand drilling is necessary, but it should not be at the expense of the people, the land and resources or Wyoming.</p>	<p>Thank you for your comments.</p> <p>Flaring and venting of Gas is authorized under certain circumstances. Typically it is authorized for a determined amount of time or up to a certain production level of gas, unless authorized by the appropriate State regulatory agency or with the prior authorization, approval, ratification, or acceptance of the Supervisor, as explained in <i>Notice to Lessees and Operators of Onshore Federal and Indian Oil and Gas Leases</i> (NTL-4A) <u><a href="#">Royalty or Compensation for Oil and Gas Lost</a></u></p> <p>Additional resources are below for your reference:</p> <ul style="list-style-type: none"> <li>• <a href="#">Oil and Gas Operations Regulations (43 CFR 3160)</a> Code of Federal Regulations (CFR) governing operations associated with the exploration, development and production of oil and gas on federal and Indian lands. Users may download official versions of CFR sections from the Government Printing Office official website (ASCII Text or Adobe Acrobat versions available).</li> <li>• <a href="#">Onshore Oil and Gas Orders</a> Onshore Oil and Gas Orders clarify and supplement the regulations found at 43 CFR 3160 for conducting oil and gas operations on Federal or Indian lands.</li> <li>• <a href="#">Notice-To-Lessees</a> (NTL's) supplement or clarify the regulations found at 43 CFR Part 3160 for oil and gas operations for specific types of activities or to address local or regional issues.</li> </ul> <p>As production is established the companies would likely construct gathering systems, which would decrease the flaring and the amount of traffic.</p>	Non-specific
PC-3	Private Citizen	My wife and two daughters have neurological disorders. Because of health issues we have taken extreme measures to avoid chemicals. We grow most of our own produce; raise all of our eggs, poultry, dairy and beef. One daughter has been able to get off all her expensive and dangerous seizure medication because of our chemical free lifestyle. Because of the flare tubes, we now have dangerous gases (containing various chemicals) spewing all over our land and food sources. We are not allowed on the well sites to dump our trash, wastes or chemicals, why are they allowed to dump gases and chemicals into the air we breathe and on to our property? The gases and chemicals from the flare tubes	<p>Thank you for your comments.</p> <p>Flaring and venting of Gas is authorized under certain circumstances. Typically it is authorized for a determined amount of time or up to a certain production level of gas, unless authorized by the appropriate State regulatory agency or with the prior authorization, approval, ratification, or acceptance of the Supervisor, as explained in <i>Notice to Lessees and Operators of Onshore Federal and Indian Oil and Gas Leases</i> (NTL-4A) <u><a href="#">Royalty or Compensation for Oil and Gas Lost</a></u></p>	Non-specific

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>have a high potential to cause health problems to our family.</p> <p>The flares around our home have been flared for more than 15 days over 60mcf as allowed by WOGCC regulations. The flares also had rolling black smoke coming from them, which is unclean gas, hydrocarbons. We currently have 4 flares within a mile radius. This concentration of flares around ours and our neighbors’ homes have killed our gardens, made us and our livestock sick and we went a long time with few birds in the area.</p> <p>When we purchased our home and land 8 years ago, the first thing we did was add a deck to the front of the house. All these years we have enjoyed many hours of family time watching birds, bees and other vectors that are no longer here to pollinate the garden. We watched our herd of heritage cattle, clear skies and the sunsets, while cementing family bonds with conversation. We used to have friends over, who wanted to get out of town and relax on our quiet deck. Nobody wants to sit on the deck or be outside; the noise from the flare tubes is unbearable. It sounds like we are living on the tarmac of Denver International Airport and some days it is nonstop. At least if the noise was being caused by a neighbor, we could ask him to correct the noise problem. If that did not work then we could call the sheriff to correct the noise problems. Who do we call about the air and noise pollution caused by the flare tubes? This kind of noise would never be allowed in a residential area in town or a subdivision.</p> <p>We have had the added expenses in electric bills, because we cannot sleep with our windows open, and now run the A/C all the time. It is very hard to sleep with a jet engine noise in our bedroom.</p> <p>If we had to move our family in the near future, it would be very hard if not impossible to sell our home. Driving by the gas flare (in close proximity to the road) to get home is a definite turnoff. We would never consider purchasing our home at this time because of the noise, dust, truck traffic, air pollution, chemicals and heat from the flare tube (we drive by to get home) and view have all changed for the worse since the Niobrara has been developed.</p> <p>What will the heat from the flare tube do to the road in the winter months? As we drive by, in 100+ temperatures, we feel an even hotter scorching heat through the windows and doors of our vehicles. Antelope road has become dangerous to drive on, with the truckers driving like they own the road. Antelope Road has steep hills on narrow gravel roads with blind spots; this is only</p>	<p>Additional resources are below for your reference:</p> <ul style="list-style-type: none"><li>• <a href="#">Oil and Gas Operations Regulations (43 CFR 3160)</a> Code of Federal Regulations (CFR) governing operations associated with the exploration, development and production of oil and gas on federal and Indian lands. Users may download official versions of CFR sections from the Government Printing Office official website (ASCII Text or Adobe Acrobat versions available).</li><li>• <a href="#">Onshore Oil and Gas Orders</a> Onshore Oil and Gas Orders clarify and supplement the regulations found at 43 CFR 3160 for conducting oil and gas operations on Federal or Indian lands.</li><li>• <a href="#">Notice-To-Lessees</a> (NTL's) supplement or clarify the regulations found at 43 CFR Part 3160 for oil and gas operations for specific types of activities or to address local or regional issues.</li></ul> <p>As production is established the companies would likely construct gathering systems, which would decrease the flaring and the amount of traffic.</p>	

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>going to get worse with winter weather. Besides the near accident to Kristi, we hear, from our neighbors, of near accidents all the time. We also have to deal with all the dust from the new gravel roads. Our lungs have been working overtime all summer, between the hydrocarbon pollution and dust.</p> <p>If the oil companies were more responsive to fix broken equipment or clean up all the contamination after an accident, our experience would have been better than what we dealt with this past summer. Chesapeake was informed from the State DEQ that it's flares were not working properly, it took a call from a state senator to get some action.</p> <p>Will the BLM respond to calls if there are problems? Will the BLM check more than 52 acres for contamination for a well blow out? Will the BLM address all the pollution problems? Will the BLM protect human life and wildlife? Will the BLM protect personal property rights?</p> <p>We would like to see the oil activity slow down and take appropriate measures to insure the safety and the way of life for the residents of Wyoming.</p>		
PC-4	Private Citizen	<p>I write this letter with deep concern for the future health of Wyoming. I am an 18-year-old native Wyoming resident and student attending the University of Wyoming. As I read the newspaper, I saw BLM is considering the possibility of more oil and gas wells. I was horrified. I am not going to pretend that I am much of an expert on the subject or that I know much about the project in particular, however, I do know some about the extraction process. For this reason I feel morally obligated to express my opinion before you decide the outcome of the oil and gas assessments.</p> <p>Last year in my environmental science class watching the documentary <i>Gas Land</i>, created by Josh Fox. Before I viewed this documentary I believed, just like many, the fallacies of the oil companies; drilling is good for developing Wyoming, we all need oil and it's not really that bad for the environment. However, this documentary introduced a whole other side of drilling that I had never considered before. I don't know if you have seen the documentary, but it really made my stomach cringe. They highlighted the lack of regard that gas companies seem to have for the land, water, and wildlife they disturbed. The most disturbing was how they treated the people who wanted questions answered. Money, that's all they are about. People could light their tap water on fire, and gas companies claimed the water was fine. People began suffering from chronic illness that correlated to the drilling or the wells. Animal migration paths were</p>	<p>Thank you for your comments.</p> <p>As stated at the very end of Chapter 4, "The [Wyoming State Engineers Office] SEO water permits define the types of beneficial use, the area of water use, and the quantity of water allowed for use. Water supply needs for oil and gas development, including fracturing, are considered short-term or temporary in nature. Hydraulic Fracturing: A Wyoming Energy Forum (2012). In the RFD, hydraulic fracturing was discussed as a typical completion technique.</p> <p>"Wyoming has regulated well stimulation since the 1950s and was the first state to implement rules for hydraulic fracturing in 2010. Wyoming's rules cover four key areas: 1) the protection of groundwater and the identification of permitted water supply wells within a quarter-mile of the drilling and spacing unit or WOGGC-approved drilling units; 2) clarification of requirements for well integrity, casing setting depths, casing design and cementing properties; 3) requirements for disclosure of well stimulation fluid (frac fluid) chemicals additives, compounds and concentrations or rates; and 4) requirements for the handling of flowback water." Hydraulic Fracturing: A Wyoming Energy Forum (2012).</p> <p>In addition to Wyoming's rules for hydraulic fracturing the BMPs and resource specific mitigation measures for surface disturbing activities, highly erosive soils, water wells,</p>	Non-specific

Converse County EAs Comment Response and Errata

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>disrupted. The air was polluted and unbreathable.</p> <p>Most recently in Wyoming the people of Pavillion have suffered most likely from the same problem. The oil companies promised the money and claimed that the water wouldn't be affected. Now the wells in the Pavillion are contaminated.</p> <p>All I can think is there could potentially be 100 more of these fracking wells going up very soon in Wyoming. I don't think anyone would warmly welcome a deceptive, lying person into their home; morals aren't stopping them. Who knows what they will do? I know money is driving it; money for the oil and gas companies, and money for the tight state budget. As much as I wish the expression "money makes the world go 'round", wasn't true, it is. This decision shouldn't be made for money; there are bigger things at stake. No one knows all of the negative implications of drilling and fracking and how it affects us in the future. I believe that until there is a safer ways of extraction, oil companies should not be authorized to explore the open spaces of Converse and western Niobrara County. Thank you for your time.</p>	<p>springs, or artesian and flowing wells, and Class I and II Waters are consistent with the ROD/RMP and is not anticipated to exceed the surface and groundwater impacts analyzed in the Casper RMP FEIS.</p> <p>The BLM approves and permits oil and gas development consistent with all appropriate federal, state, and local laws.</p>	
TB-1	Thunder Basin Grasslands Prairie Ecosystem Association (TBGPEA)	I think you have a typo at the top of page 52 in the sage-grouse section. The first full sentence in the first paragraph states "If an APD were submitted within the north Glenrock core area..." Do you mean to refer to the Thunder Basin core area instead?	<p>BLM agrees with the commenter and will make the recommended changes to the EA.</p> <p>Yes, this should refer to the Thunderbasin Sage-grouse Core Area.</p>	East Converse
TB-2	TBGPEA	I have some additional burrowing owl and sage-grouse sightings (Sec 11 35/67) close to the analyzed area but nothing within it.	Thank you for your comment.	East Converse
WGFD-1	Wyoming Game and Fish Department (WGFD)	<p><b>Terrestrial Considerations:</b></p> <p>We appreciate the EA address in the need to complete a Density and Disturbance Calculation, prior to development with sage grouse core areas. We have no additional terrestrial wildlife concerns pertaining to this EA.</p>	Thank you for your comment.	All 3 EAs
WGFD-2	WGFD	<p><b>Aquatic Considerations:</b></p> <p>To minimize impacts to the aquatic resources of nearby waterways, we recommend the following:</p> <ul style="list-style-type: none"> <li>* Accepted best management practices are implemented to ensure that all sediments and other pollutants are contained within the boundaries of the work area. Disturbed areas that are contributing sediment to surface waters as a result of project related activities should be promptly re-vegetated to maintain</li> </ul>	<p>Best Management Practices (BMP's) are implemented for all actions to prevent sediment and other pollutants from moving off site. This will be attached to each Application for Permit to Drill (APD) at the permitting stage in the Conditions of Approval (COAs).</p> <p>A requirement for fueling and servicing equipment greater than 300 ft. from riparian areas is not supported by the CFO RMP.</p>	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>water quality.</p> <ul style="list-style-type: none"><li>* Equipment should be serviced and fueled away from streams and riparian areas. Equipment staging areas should be at least 300 feet from riparian areas.</li><li>* Preventing the spread of aquatic invasive species (AIS) is a priority for the State of Wyoming, and in many cases, the international spread of organisms from one body of water to another would be considered a violation of State statute and Wyoming Game and Fish Commission Regulations. To prevent the spread of AIS, we recommend the following:</li></ul> <p>If equipment has been used in an area known to contain aquatic invasive species or suspected to contain aquatic invasive species, the equipment will need to be inspected by an authorized aquatic invasive species inspector certified in the state of Wyoming prior to its use in any Wyoming water. If aquatic invasive species are found, the equipment will need to be decontaminated. Decontamination may consist of either 1) Drain all water from equipment and compartments, Clean equipment of all mud, plants, debris, or animals, and Dry equipment for 5 days in summer (June, July &amp; August); 18 days in Spring (March, April &amp; May) and Fall (September, October &amp; November); or 3 days in Winter (December, January &amp; February) when temperatures are at or below freezing, Or</p> <p>2) Use a high pressure (3500 psi) hot water (1400F) pressure washer to thoroughly wash equipment and flush all compartments that may hold water.</p>	<p>This is a WGFD policy and is not supported by the CFO RMP. If state law requires the recommended actions to take place then the operator will be required to abide by state law.</p>	
APC-1	Anadarko Petroleum Corporation (APC)	<p><b><u>Decisions to be Made After the EA Process</u></b></p> <p>Although the Decision Records for the respective EAs would approve a level of oil and gas development, the analysis of a project component involving surface disturbance of federal lands must be approved on a site-specific basis by the BLM. However, it is not clear from the EAs how the Casper Field Office plans to evaluate each surface disturbing activity after the EA process (e.g., via Categorical Exclusion, Application for Permits to Drill, right-of-way application process). This deficiency can be remedied if the Casper Field Office revises the "Decision to be Made" subsection on to identify decision to be made after the EA process.</p>	<p>BLM agrees with the commenter and will make the recommended changes to the EA.</p> <p>Surface disturbing and site specific authorizations for each individual action will be approved through the APD process and compliant with NEPA with Determinations of NEPA Adequacy (DNA) or Categorical Exclusions (CX).</p>	Spearhead Ranch & East Converse
APC-2	APC	<p><b><u>Mitigation Measures</u></b></p> <p><b><u>Air Quality</u></b></p> <p>The Air Quality section of Chapter 4 of the EAs identifies green "flareless" completions as a possible mitigation measure. It is unclear if this mitigation measure also applies to the testing phase. It is APC's standard business practice to complete wells using green or reduced emissions completions where operational conditions allow; however, it is an important safety practice to</p>	<p>This is listed as a mitigation measure for air quality impacts and the EA specifically states, "Such mitigation measures may include, but are not limited to:" Whenever possible we are going to use green "flareless" completions depending on the infrastructure in place, specifically where our regulations allow for it</p>	Spearhead Ranch & East Converse

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>incorporate flares in the event of an upset or malfunction. Even so, due to the exploratory nature of the proposed wells, the infrastructure (i.e., pipelines, compression systems and other infrastructure) may not be in place to accommodate flareless completions.</p> <p>Under the Clean Air Act, the Environmental Protection Agency (EPA) has the authority to regulate air emissions. In Wyoming, the EPA has delegated its authority to the Wyoming Department of Environmental Quality (WDEQ). <i>See</i> 42 U.S.C. §§ 7401- 7671q; 40 C.F.R. pts. 0-99 (2009); 40 C.F.R. § 52.2620 (Wyoming's State Implementation Plan); WYO. STAT. ANN. §§ 35-II-201 to 214 (LexisNexis 2009); Wyo. Air Quality Stds. &amp; Regs. ("W AQSR") Chs. 1 - 14.</p> <p>While the WDEQ has regulatory authority over air quality, the Wyoming Oil and Gas Conservation Commission (WOGCC) authorizes up to 60 thousand cubic feet (MCF) per day for gas that does not constitute waste to be vented or flared from individual wells (Chapter 3, Section 39(b) of the WOGCC Rules and Regulations). The WOGCC may also permit flaring for gas volumes greater than 60 MCF per day not constituting waste on an exception basis approved through a hearing process or by the State Oil and Gas Supervisor with a letter permit.</p>		
APC-3	APC	<p><u>Mitigation Measures</u></p> <p><i>Invasive, Non-Native Species</i></p> <p>The Invasive, Non-Native Species section of Chapter 4 of the EAs includes a mitigation measure requiring well pads to be fenced off from livestock grazing for two years after seeding and weed control to give the vegetation a chance to germinate and establish in areas. Due to the expansive nature of the typical land use in NE Wyoming, reclamation success is not dependent upon fencing of oil and gas locations other than that necessary in close proximity to operational equipment. Only in special circumstances, such as locations in small scale intensive grazing operations or where the reclamation potential is severely limited, would fencing of an entire location be practical and beneficial to reclamation success. To provide a more adaptable management approach to meet the site-specific needs, the Casper Field Office is encouraged to require operators to monitor for noxious and invasive weed species and apply BLM approved weed control techniques (e.g., soil sterilants, herbicides, physical and cultural controls) as necessary to control infestations with the prior approval of the BLM Authorized Officer (AO). Also, for clarification, consider pointing out that reclamation on private surface</p>	<p>The BLM has included fencing as a mitigation measure to reduce impacts and for more timely reclamation success. These measures will be applied on a case by case basis at the APD stage as approved by the Authorized Officer. When on private land, consideration will be given to landowner and the surface use agreement.</p>	<p>Spearhead Ranch and East Converse</p>

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		lands would be in accordance with surface use agreements developed with the involved private landowner. Reclamation on federally-administered surface lands would be in accordance with management direction from the BLM AO and surface lessee.		
APC-4	APC	<u>Mitigation Measures</u> <u>Water Resources</u> The Water Resources section of Chapter 4 includes a mitigation measure requiring a watershed analysis to be completed for each crossing to assess whether a culvert is needed and the proper sizing." The Casper Field Office has historically required that low-water crossings or metal culverts be installed and maintained at all drainage crossings in accordance with standards in BLM Manual 9113. Water shed analysis, if required, is typically requested at the time of the onsite at the discretion of and with management direction from the BLM AO. This management approach provides a suitable level of oversight to effectively prevent potential impacts to water resources resulting from the lack of a culvert or an improperly sized culvert. The Casper Field Office is encouraged to rely on practicable management protocols that have been successful in the past.	Watershed Analysis is compliant with BLM Manual 9113. Exceptions may be applied for at the APD stage and can be granted by the Authorized Officer.	Spearhead Ranch and East Converse
NCD-1	Niobrara Conservation District	If exploration is to occur, we would like to see it completed in an environmentally responsible manner. Even at the exploration phase the protection of the natural resources should be of the highest concern, the burden of which should not fall on the private landowner. This becomes especially important in the case of split estates. Energy development should not be completed at the cost of the productivity of other resources. Resources such as groundwater, surface water and rangeland are vital to many of the landowner's ability to make a living. Particularly in split estates, these very landowners have the least to gain, economically, from these endeavors.	<p>In split estate situations, the surface rights and subsurface rights (such as the rights to develop minerals) for a piece of land are owned by different parties. In these situations, mineral rights are considered the dominant estate, meaning they take precedence over other rights associated with the property, including those associated with owning the surface. However, the mineral owner must show due regard for the interests of the surface estate owner and occupy only those portions of the surface that are reasonably necessary to develop the mineral estate.</p> <p>The BLM's split estate policy only applies to situations where the surface rights are in private ownership and the rights to development of the mineral resources are publicly held and managed by the Federal government. In the Energy Policy Act of 2005, Congress ordered a report reviewing current policies and practices that the BLM uses in managing oil and natural gas resources in split estate situations. Congress directed the BLM to consult with affected property owners, representatives of the oil and gas industry, and other interested parties while completing the review to consider how best to facilitate reasonable access for Federal oil and gas activities and minimize impacts to privately owned surface. The BLM transmitted this report to Congress in December of 2006.</p>	East Converse

Comment #	Organization/ Commenter	Comment	BLM Response	Document
			<p><b>Onshore Oil and Gas Order No. 1 – Split Estate Requirements</b> Onshore Oil and Gas Order Number 1 lays out the requirements necessary for the approval of any proposed oil and gas development on those leases. When it was modified in 2007, Onshore Order No. 1 gave private surface owners additional rights. For more information about the rights, responsibilities, and opportunities afforded the BLM, the oil and gas lessee/operator, and the surface owner under Onshore Oil and Gas Order No. 1, please click on the following link: <a href="http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/Onshore_Order_no1.htm">www.blm.gov/wo/st/en/prog/energy/oil_and_gas/Onshore_Order_no1.htm</a></p> <p><b>Split Estate and Land Management Policy</b> The BLM manages the public lands, including the Federal mineral estate, to enhance the quality of life for present and future generations of Americans, under a mandate of multiple use as described in the <a href="#">Federal Land Policy and Management Act</a>. The <a href="#">Mineral Leasing Act</a> guides the land use planning, leasing, bonding, operations and reclamation associated with all development of Federal oil and natural gas resources. Various laws granted land patents to private individuals but reserved the mineral rights to the Federal Government. The BLM must comply with the provisions of the laws under which the surface was patented. However, many of those laws do not identify the rights of the surface owner in split estate mineral development situations. To better define the rights of the private surface owner, the BLM revised the Onshore Oil and Gas Order Number 1 and issued the Oil and Gas Gold Book in 2007.</p> <p>For more information about the rights, responsibilities, and opportunities afforded the BLM, oil and gas lessee/operator, and the surface owner, please view the following brochure. The brochure may also be available in your local BLM office. <b>Split Estate Brochure: Rights, Responsibilities, and Opportunities</b>   <a href="#">PDF</a>   <a href="#">Word</a></p> <p>For additional References see:</p> <p>Energy Policy Act, Section 1835 - Split Estate</p> <p>Gold Book text on Split Estate (2007)</p> <p>IM 2003-131 Split Estate</p> <p>IM 2007-021 Split Estate Leasing and Planning</p>	



Comment #	Organization/ Commenter	Comment	BLM Response	Document
NCD-2	Niobrara Conservation District	<p>The groundwater protection needs to be addressed from the stand point of the gas production wells as well as the water supply source for drilling and fracturing. This becomes a water quality as well as a water quantity concern. The EA recognizes that there are 173 permitted wells within a 1mile radius of the area to be developed. These wells would be most at risk for contamination due to either accidents or improper operations. The ROD for the Pinedale Anticline states that <i>"The operators will conduct a survey and a complete water analysis (e.g., static water level, alkalinity, salinity, benzene, oil, etc) of all water wells within a 1 mile radius of existing and proposed development, and annually monitor and maintain a complete record of water analysis for all new water supply wells drilled in the project area to evaluate the quality of source options in the event some mitigation is required."</i> We would like to see this precedent followed here as well. We also believe that <u>a</u>ll water wells, in use within the 1mail radius, should be monitored annually for the lifetime of the project to monitor for potential contamination and well draw down. This monitoring would be a protective measure for the well owner as well as the drilling operators. Procedures and BMP's are in place to protect contamination of aquifers and wells however there is always the possibility of accidents, unplanned results and poor workmanship. Continued monitoring would allow a more timely response to any of these events. Initiating monitoring prior to the exploration phase will give a good basis for comparison as the project continues. This early monitoring will also reveal any questionable results prior to any project activity.</p>	<p>The BLM's ability to require testing of water wells is limited due to the relatively small amount of public lands (surface estate) within the project area. The risk of water quality being impacted is low due to differences in depths of the water wells compared to the depths of the targeted zones.</p> <p>The wells identified in the alternatives represent a relatively small ratio of wells for the geographic size of the project area. The wells are exploratory and are likely to be widely dispersed in comparison to the Pinedale Anticline full field development scenario in the example. Although the BLM would encourage and support monitoring water wells, it is more appropriate with intensive development such as full field development.</p> <p>From The combined cumulative section of all three EAs at the very end of Chapter 4. "Wyoming has regulated well stimulation since the 1950s and was the first state to implement rules for hydraulic fracturing in 2010. Wyoming's rules cover four key areas: 1) the protection of groundwater and the identification of permitted water supply wells within a quarter-mile of the drilling and spacing unit or WOGGC-approved drilling units; 2) clarification of requirements for well integrity, casing setting depths, casing design and cementing properties; 3) requirements for disclosure of well stimulation fluid (frac fluid) chemicals additives, compounds and concentrations or rates; and 4) requirements for the handling of flowback water" (Hydraulic Fracturing: A Wyoming Energy Forum) (2012).</p> <p>In addition to Wyoming's rules for hydraulic fracturing the BMPs and resource specific mitigation measures for surface disturbing activities, highly erosive soils, water wells, springs, or artesian and flowing wells, and Class I and II Waters are consistent with the ROD/RMP and is not anticipated to exceed the surface and groundwater impacts analyzed in the Casper RMP FEIS.</p>	East Converse
NCD-3	Niobrara Conservation District	<p>Surface water in the area needs to be protected,the EA noting 182 permitted water rights within a 1 mile radius of the project area. Although the surface waters in the area are generally not perennial they are known to have extremely flashy flows through the summer months from intense rain events. While there are BMP's in place for the use of pits for fracturing and drilling fluids we feel that tanks may provide more reliable containment and be easier to monitor for leaks and excursions. This may provide added protection from accidental overland flow to a surface water. We appreciate the use of tanks for all produced water during the project as stated in the EA.</p>	<p>Pits will be constructed, maintained, and reclaimed according to IM WY-2012-007 "Management of Oil and Gas Exploration and Production Pits"</p>	East Converse

Converse County EAs Comment Response and Errata

Comment #	Organization/ Commenter	Comment	BLM Response	Document
NCD-4	Niobrara Conservation District	All reclamation of rangeland needs to occur based on the Ecological Site Descriptions and soil types of the project area. Reclamation should be carried out to minimize scarring and return the site to its original productivity. Success of the reclamation effort should be based on seventy-five percent of perennial forb and grass cover over a three year period.	<p>Reclamation of the well locations, roads, pipe lines and facilities would be conducted in accordance with Onshore Order #1, Instruction Memorandums WY-2012-007, Management of Oil and Gas Exploration and Production Pits and WY-2012-032, Wyoming Bureau of Land Management Reclamation Policy and The Gold Book, prepared by U.S. Forest Service and BLM for Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development and Appendix D of the EA.</p> <p>The long-term objective of final reclamation is to set the course for eventual ecosystem restoration, including the restoration of the natural vegetation community, hydrology, and wildlife habitats. In most cases, this means returning the land to a condition approximating or equal to that which existed prior to the disturbance. The operator is generally not responsible for achieving full ecological restoration of the site. Instead, the operator must achieve the short-term stability, visual, hydrological, and productivity objectives of the Bureau of Land Management (BLM) and take the steps necessary to ensure that long-term objectives will be reached through natural processes.</p>	East Converse
PAW-1	Petroleum Association of Wyoming (PAW)	<p>PAW generally supports the Agency Alternative as it allows for the most flexibility when compared with the other alternatives. It accommodates the possibility of multiple wells per pad through the use of various drilling techniques, including vertical, directional and horizontal. It also takes into consideration the utilization of existing access roads and pipelines to minimize disturbance and environmental impacts. For these reasons, PAW supports the Agency Alternative because it provides an ecologically balanced management approach that provides for the largest number of wells while ensuring the least amount of acreage is disturbed.</p> <p>While we support those elements of the Agency Alternative listed above, PAW points out this alternative provides for an average of one to four wells per pad with an average well pad size of 4.21 acres. We recommend it be emphasized that these are not maximum numbers, but rather average numbers and that the Agency Alternative does in fact provide for more than four wells per pad where feasible and, accordingly, a larger well pad size as necessary.</p>	<p><b>BLM will make the following changes to the EA(s), based on this comment.</b></p> <p>The following wording was added as a footnote to Table 2.1 Comparison of Alternatives of each EA:</p> <p>“The values used in this table are assumptions, based on calculated averages. Actual disturbance, well pad size, and number of wells on a pad, may vary based on site-specific topography, distances, and targeted resources. However, the total authorized short and long term disturbances analyzed within this EA would not be exceeded.”</p>	All 3 EAs
PAW-2	PAW	Additionally, PAW urges BLM to track and remove disturbance on well pad locations as they are successfully reclaimed. These reclaimed areas should be credited and removed from the threshold calculations as set forth in the Resource Management Plan.	<p><b>BLM will make the following changes to the EA(s), based on this comment.</b></p> <p>“As a way to monitor and track approved versus actual disturbance and reclamation success, the BLM may require as built shapefiles from operators. Tracking and monitoring reports will be maintained for the project.”</p>	All 3 EAs
PAW-3	PAW	Well Locations, East Converse EA, Highland Loop Road EA, Spearhead Ranch EA, page 19, bullet 2:	<b>BLM agrees with the commenter and will make the recommended changes to the EA(s).</b>	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>"• a series of three earthen reserve pits designed to contain the drilled cuttings and/or fluids to be used during the completion operation."</p> <p>It is important for BLM to acknowledge that some companies do not use, and have never been required to use, three reserve pits on a location. Companies have successfully utilized different methods of reaching the same environmental goals. For example, a company may use one cuttings pit with a divider down the middle. Consequently, we urge BLM to modify this bullet as follows,</p> <p>"• a series of up to three earthen reserve pits designed to contain the drilled cuttings and/or fluids to be used during the completion operation."</p> <p>As long as the design meets BLM's well location objectives, it should be accepted during the permitting process in order to provide flexible options that will achieve the same goals</p>		
PAW-4	PAW	<p>Drilling Operations, East Converse EA, Highland Loop Road EA, Spearhead Ranch EA, page 20, third paragraph, third sentence:</p> <p>"To make up the drilling mud, water would be hauled to each location from a commercial source identified in the APD package."</p> <p>This language is restrictive and PAW believes it should be expanded to allow water needs to be achieved by means other than a commercial source, e.g., water supply wells drilled in the field or other acceptable methods. In order to allow for other sources of water supply, PAW urges the wording of this sentence be changed to read,</p> <p>"To make up the drilling mud, water would be hauled to each location from a commercial source, or obtained and transported from other sources, as identified in the APD package."</p>	BLM agrees with the commenter and will make the recommended changes to the EA(s).	All 3 EAs
PAW-5	PAW	<p><b>Production Operations, East Converse EA, Spearhead Ranch EA, page 25, third paragraph, last sentence:</b></p> <p>"Figure 1 displays a typical production facility layout."</p> <p>Figure 1 in these EAs is located on page 33 and is not a typical production facility layout, but actually a graph entitled "Annual Visibility (SVR) for the</p>	BLM agrees with the commenter and will make the recommended changes to the EA(s).	All 3 EAs

Converse County EAs Comment Response and Errata

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		Thunder Basin IMPROVE site in 2010. A typical production facility layout is located on the third page of Appendix B. This is a cause for confusion and BLM should either remove this sentence, correctly identify Figure 1, or refer to Appendix B as the location of a typical production facility layout.		
PAW-6	PAW	<p><b>SPEARHEAD Range Management, Agency Alternative, East Converse EA page 67, Highland Loop Road EA page 72, Spearhead Ranch EA page 71, third paragraph, third sentence:</b></p> <p><i>"Consequently, the potential and extent of impacts to the soils and ecological sites would be the same as the Proposed Action at the smallest development ratio (one well per well pad/location) and the lowest of the three alternatives at the largest development ratio (four wells per well pad/location) when compared to the No Action Alternative."</i></p> <p>PAW believes this is an error. In order to remain consistent with the other alternatives discussed in this Range Management Section, this sentence should actually read, <i>"Consequently, the potential and extent of impacts to livestock grazing and range management would be the same as the Proposed Action . . ."</i></p> <p><i>"The impacts of soils and ecological sites are discussed in the following section titled Soil and Ecological Sites."</i></p>	BLM agrees with the commenter and will make the recommended changes to the EA(s).	All 3 EAs
PAW-7	PAW	<p><b>SPEARHEAD Range Management, Mitigation Measures, East Converse EA page 67, Highland Loop Road EA page 72, Spearhead Ranch EA page 71, first paragraph, first sentence:</b></p> <p><i>"For short-term and long-term reductions in AUMs, the lessee can apply for a credit to the grazing lease annual bill on a yearly basis."</i></p> <p>For the purpose of clarification this sentence should be modified as follows, <i>"For short-term and long term reductions in the AUMs, the grazing lessee can apply ..."</i></p> <p>As currently written, it is unclear whether BLM is referring to the grazing lessee or the mineral lessee that would be impacted by the grazing lease payments.</p>	BLM agrees with the commenter and will make the recommended changes to the EA(s).	All 3 EAs
PAW-8	PAW	<p>Soils and Ecological Sites, Mitigation Measures, East Converse page 71, Highland Loop Road page 75, Spearhead Ranch EA page 75, paragraph numbered 8:</p> <p><i>"Topsoil stored for a period greater than 90 days will not exceed piles of 3 feet in</i></p>	<p>To increase both interim reclamation and final reclamation success it is critical to maintain healthy biologically active topsoil.</p> <p>Once topsoil has been stripped of vegetation and disturbed, it is highly susceptible to</p>	All 3 EAs

Converse County EAs Comment Response and Errata

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p><i>depth and will be seeded with a BLM approved seed mix to prevent wind and water erosion and to reduce the loss of microbial activity within the soil."</i></p> <p>PAW recommends that this timeframe be changed from 90 days to 1year. If a well pad is built early in the year and is scheduled for fall seeding, it would be impossible to meet the prescribed 90 day time period. Additionally, BLM needs to recognize that in order for topsoil piles to be 3 feet high or less after 90 days will require a lot additional of space which would require unnecessary surface disturbance. The sentence should be modified as follows, "Topsoil stored for a period of greater than 1 year will not exceed piles of 3 feet in depth ...,"</p>	<p>both wind and water erosion, therefore it should be re-vegetated as soon as practicable. The 90 day time table does allow flexibility in scheduling the reseeding effort. As examples a well pad built early in the year, could have reseeding performed in the spring, just as a well pad built in July, could have reseeding performed in the fall. If extenuating circumstances exist, operators may apply for an exception with approval by the authorized officer.</p> <p>Stockpiling topsoil results in the loss or elimination of soil microbes, bacteria, viable seeds and plants. The loss is accelerated when soils are stockpiled more than several feet in height and biological activity is diminished from lack of oxygen.</p> <p>Top soil can be stored as a long row and used as a berm along the bottom of the fill slopes along the well pad, to keep the soil viable, while reducing the amount of disturbance associated with topsoil pile storage.</p>	
PAW-9	PAW	<p>Soils and Ecological Sites, Mitigation Measures, East Converse EA page 72, Highland Loop Road EA page 76, Spearhead Ranch EA page 76, paragraph numbered 15:</p> <p><i>"Topsoil stored for a period greater than 90 days will not exceed piles of 3 feet in depth and will be seeded with a BLM approved seed mix in order to prevent wind and water erosion and to reduce the loss of microbial activity within the soil"</i></p> <p>This paragraph is a repeat of paragraph number 8 in the same section and, as such, should be removed in its entirety.</p>	<p><b>BLM agrees with the commenter and will make the recommended changes to the EA(s).</b></p>	All 3 EAs
PAW-10	PAW	<p>Invasive, Non-Native Species, Mitigation Measures, East Converse EA page 74, Highland Loop Road EA page 78, Spearhead Ranch EA page 79, first paragraph, first sentence:</p> <p><i>"The operator shall provide a Pesticide Utilization Proposal (PUP) and an Integrated Pest Management Plan (IPMP) as part of the complete APD package for any part of the project is located on BLM surface."</i></p> <p>PAW questions the need for this new requirement and recommends that it be removed. As a matter of routine submittals of APD packages, field offices have not required that APD packages include a PUP and/ or an IPMP. PAW recommends that while these documents could be referenced in the APD</p>	<p>Per Oil and Gas On Shore Order No. 1</p> <p>4. Surface Use Plan of Operations:</p> <p>I. <i>Other Information:</i> The operator must include other information required by applicable orders and notices (43 CFR 3162.3–1(d)(4)). When an integrated pest management program is needed for weed or insect control, the operator must coordinate plans with state or local management agencies and include the pest management program in the Surface Use Plan of Operations.</p> <p>The BLM also encourages the operator to submit any additional information that may be helpful in processing the application.</p>	All 3 EAs

Converse County EAs Comment Response and Errata

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		package, BLM should allow them to be provided separately.		
PAW-11	PAW	<p>Invasive, Non-Native Species, Mitigation Measures, East Converse EA page 74, Highland Loop Road EA page 78, Spearhead EA page 79, first paragraph, second sentence:</p> <p><i>"In the case of split estate, the operator shall include the IPMP within the Surface Use Agreement with the private surface owner."</i></p> <p>PAW recommends that BLM clarify the procedure for operators to convey information contained in private surface use agreements (SUA) to BLM or remove this requirement altogether. PAW agrees that PUP's and IPMP's are an important part of reclamation activities; however, PAW objects to the requirement that operators must provide all or parts of private surface use agreements to BLM. Alternatively, BLM could request a statement of certification from operators confirming that the IPMP has been addressed in the SUA and that private interests are protected.</p>	<p>Per Oil and Gas On Shore Order No. 1</p> <p>4. Surface Use Plan of Operations:</p> <p>k. <i>Surface Ownership</i>: The operator must indicate (in a narrative) the surface ownership at the well location, and of all lands crossed by roads that the operator plans to construct or upgrade, including, if known, the name of the agency or owner, phone number, and address. <b>The operator must certify that they have provided a copy of the Surface Use Plan of Operations required in this section to the private surface owner of the well site location, if applicable, or that they made a good faith effort if unable to provide the document to the surface owner.</b></p>	All 3 EAs
PAW-12	PAW	<p>Invasive, Non-Native Species, Mitigation Measures, East Converse EA page 74, Highland Loop Road EA page 79, Spearhead Ranch EA page 79, 4th paragraph:</p> <p><i>"Reclamation of newly developed access roads should also be completed and vehicle traffic kept out to prevent any future introduction of INPS."</i></p> <p>This paragraph is unclear and requires clarification. We are uncertain whether BLM is referring to roadside reclamation, final road abandonment reclamation, or both.</p>	<p>BLM agrees with comment, the following changes to the EA(s) will be made:</p> <p>Change text to:</p> <p>"All surface disturbance not utilized in the running surface of the road should have interim reclamation performed. All vehicle traffic should be kept to the running surface to prevent the transport of INPS."</p>	All 3 EAs
PAW-13	PAW	<p>Water Resources Groundwater, No Action, Proposed Action and Agency Alternative, East Converse EA page 76, Highland Loop EA page 80, Spearhead Ranch EA page 80-81, first paragraph, first sentence:</p> <p><i>"Impacts to groundwater occur two ways: through actual water usage and injection into the ground."</i></p> <p>PAW objects to the assumption contained in this statement that underground injection always causes impacts to groundwater and recommends that it be reworded. As written, the general public may construe this statement to mean that all groundwater will be impacted by injection into the ground by industry.</p>	<p>The UIC Program protects USDWs from <a href="#">endangerment</a> by setting minimum requirements for injection wells. All injection must be authorized under either general rules or specific permits. Injection well owners and operators may not site, construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity that endangers USDWs. The purpose of the UIC requirements is to:</p> <ul style="list-style-type: none"> <li>• Ensure that injected fluids stay within the well and the intended injection zone, or</li> <li>• Mandate that fluids that are directly or indirectly injected into a USDW do not cause a public water system to violate <a href="#">drinking water standards</a> or otherwise adversely affect public health.</li> </ul>	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		BLM fails to point out that underground injection is regulated by the WOGCC and Wyoming DEQ to ensure that usable/ potable groundwater resources are fully protected during such operations. In addition, it must be acknowledged that all underground injection activity would be to depths far below any usable groundwater resources and that contamination from injection or fracing is highly unlikely. PAW supports the remaining discussion in this section regarding mitigation measures for groundwater resources.	<p>For more information about how the UIC regulations protect ground water:</p> <ul style="list-style-type: none"><li>• Visit the <a href="#">Regulations</a> page for more information on regulatory requirements.</li><li>• The <a href="#">Class I</a>, <a href="#">Class II</a>, <a href="#">Class III</a>, and <a href="#">Class IV</a>, <a href="#">Class V</a> and <a href="#">Class VI</a> web pages briefly describe the requirements for that well class.”</li></ul> <p>From The combined cumulative section of all three EAs at the very end of Chapter 4. “Wyoming has regulated well stimulation since the 1950s and was the first state to implement rules for hydraulic fracturing in 2010. Wyoming’s rules cover four key areas: 1) the protection of groundwater and the identification of permitted water supply wells within a quarter-mile of the drilling and spacing unit or WOGGC-approved drilling units; 2) clarification of requirements for well integrity, casing setting depths, casing design and cementing properties; 3) requirements for disclosure of well stimulation fluid (frac fluid) chemicals additives, compounds and concentrations or rates; and 4) requirements for the handling of flowback water” (Hydraulic Fracturing: A Wyoming Energy Forum) (2012).</p> <p>In addition to Wyoming’s rules for hydraulic fracturing the BMPs and resource specific mitigation measures for surface disturbing activities, highly erosive soils, water wells, springs, or artesian and flowing wells, and Class I and II Waters are consistent with the ROD/RMP and is not anticipated to exceed the surface and groundwater impacts analyzed in the Casper RMP FEIS.</p> <p>BLM agrees the risk of water quality being impacted is low due to differences in depths of the water wells compared to the depths of the targeted zones.</p>	
PAW-14	PAW	<p>Wildlife, Special Status Species, and Threatened and Endangered Species, Mitigation Measures and Monitoring and/or Compliance, East Converse EA page 84, Highland Loop Road EA, page 88, Spearhead Ranch EA page 89, first paragraph:</p> <p><i>"In order to minimize the overall impacts to wildlife within the project area which could result from additional oil/gas exploration and development activities associated with the proposed activities, the following mitigation measures are recommended."</i></p> <p>This sentence states the mitigation measures listed in the paragraphs that follow are recommended, however, in those paragraphs it is stated that the measures are actually required. PAW recommends that BLM clarify whether such mitigation measures are recommendations or requirements.</p>	<p>Agree with comment, the following changes to the EA(s) will be made:</p> <p>Change text to:</p> <p>“...the following mitigation measures will be required on a case by case basis as resource conditions dictate”</p>	All 3 EAs

Converse County EAs Comment Response and Errata

Comment #	Organization/ Commenter	Comment	BLM Response	Document
PAW-15	PAW	<p>Wildlife, Special Status Species, and Threatened and Endangered Species, Bald Eagle, East Converse EA page 85, Highland Loop EA page 89, Spearhead EA page 90, first paragraph:</p> <p><i>"Surface development or use is prohibited (NSO) on all public lands and minerals within a 1 mile radius of known or discovered bald eagle nests."</i></p> <p>PAW recommends that BLM change the language in the Bald Eagle section of the documents to mirror the management objectives of the Casper RMP which states, "Surface disturbance is prohibited from 1/2 to 1 mile of known or discovered bald eagle nests." PAW supports case-by-case analysis by BLM in order to determine the appropriate NSO buffer required to adequately protect Bald Eagle nests. As currently written in these EAs, the flexibility provided in the Casper RMP has been removed. We urge BLM to maintain consistency with the current RMP.</p>	<p>Agree with comment, the following changes to the EA(s) will be made:</p> <p>Use the following stipulations:</p> <p>Prohibit surface development in an area from 1/2- to 1-mile of known or discovered bald eagle nests. The specific distance and dimensions of the area on which surface development will be prohibited will be determined on a case-by-case basis.</p>	All 3 EAs
PAW-16	PAW	<p>Appendix A, Drilling Operations, East Converse EA page 108, Highland Loop Road EA page 116, Spearhead Ranch EA page 114, first paragraph, fourth sentence:</p> <p><i>"To make up the drilling mud, water would be hauled to each location from a commercial source."</i></p> <p>As stated previously in these comments, this language is restrictive and should be expanded to allow water needs to be achieved by means other than a commercial source, e.g., water supply wells drilled in the field or other acceptable methods. In order to allow for other sources of water supply, PAW urges the wording of this sentence be changed to read,</p> <p><i>"To make up the drilling mud, water would be hauled to each location from a commercial source, or obtained and transported from other sources."</i></p>	<p>This was an industry prepared peer reviewed report that was submitted to the BLM, as a guide for parts of the proposed action and as common practices. It is not appropriate for the BLM to make changes to Appendix A. However, the previously stated comment was noted and changes within the body of the EA were made, as a result.</p>	All 3 EAs
PAW-17	PAW	<p>Appendix D, Interim Reclamation, East Converse EA page 126, Highland Loop Road EA page 133, Spearhead Ranch EA, page 131, second paragraph, third sentence,:</p> <p><i>"Topsoil stored for a period greater than 90 days will not exceed piles of 3 feet in depth and will be seeded with a BLM approved seed mix to prevent wind and water erosion and to reduce the loss of microbial activity within the soil."</i></p> <p>As stated previously in these comments, PAW recommends that this timeframe</p>	<p>To increase both interim reclamation and final reclamation success it is critical to maintain healthy biologically active topsoil.</p> <p>Once topsoil has been stripped of vegetation and disturbed, it is highly susceptible to both wind and water erosion, therefore it should be re-vegetated as soon as practicable. The 90 day time table does allow flexibility in scheduling the reseeding effort. As examples a well pad built early in the year, could have reseeding performed in the spring, just as a well pad built in July, could have reseeding performed in the fall. If extenuating circumstances exist, operators may apply for an exception with approval</p>	All 3 EAs



Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>be changed from 90 days to 1year. If a well pad is built early in the year and is scheduled for fall seeding, it would be impossible to meet the prescribed 90 day time period. Additionally, BLM needs to recognize that in order for topsoil piles to be 3 feet high or less after 90 days will require a lot of space. The sentence should be modified as follows,</p> <p><i>"Topsoil stored for a period of greater than 1 year will not exceed piles of 3 feet in depth"</i></p>	<p>by the authorized officer.</p> <p>Stockpiling topsoil results in the loss or elimination of soil microbes, bacteria, viable seeds and plants. The loss is accelerated when soils are stockpiled more than several feet in height and biological activity is diminished from lack of oxygen.</p> <p>Top soil can be stored as a long row and used as a berm along the bottom of the fill slopes along the well pad, to keep the soil viable, while reducing the amount of disturbance associated with topsoil pile storage.</p>	
PRBRC-1	Powder River Basin Resource Council (PRBRC)	<p>Need for a Programmatic EIS and Amendment to the Casper RMP</p> <p>A Resource Management Plan (RMP) amendment with an Environmental Impact Statement is the traditional way to handle NEPA analyses for programmatic areas that are not covered in the current RMP. The wide-spread deep oil boom in the Casper Field Office (and Buffalo Field Office) is in need of programmatic analysis and amendments to the RMPs.</p> <p>In this case, as opposed to having one comprehensive programmatic EIS, the Casper Field Office chose to have three EAs at over 100 pages each. The EAs document significant, unmitigated, impacts that require preparation of an EIS for this several hundred well project.</p> <p>BLM may rely upon an EA and thereby not prepare an EIS only if the mitigation measures: (1) are mandatory; and (2) “constitute an adequate buffer’ ... so as to ‘render such impacts so minor as to not warrant an EIS.’” Wyo. Outdoor Council v. U.S. Army Corps of Engineers, 351 F.Supp.2d 1232, 1250 (D. Wyo. 2005) (quoting Greater Yellowstone Coalition v. Flowers, 359 F.3d 1257, 1276 (10th Cir. 2004)). In these EAs, BLM has not included effective and enforceable mitigation measures that reduce impacts to a level below significance.</p> <p>For instance, as discussed below, the water impacts from this large project will be significant. Significant amounts of water will be consumed – and irretrievably lost – during the drilling and hydraulic fracturing processes for the wells. BLM has not proposed measures to mitigate those impacts. Additionally, air quality impacts, socio-economic impacts, impacts relating to truck traffic, dust, and road damage, and greenhouse gas emissions are all significant, unmitigated, impacts requiring the preparation of an EIS.</p> <p>Moreover, an EIS is needed for tiering for project-level approvals. CEQ’s</p>	<p>The exploratory drilling described in the three EA’s are accounted for within the analysis in the CFO RMP. The wells and associated surface disturbance are within the projections of the current RMP and impacts of those were part of that analysis. The three converse county EAs were tiered to the CFO RMP so the BLM would not have to repeat the analysis contained in the FEIS.</p> <p>The three Converse County EAs are "umbrella documents" that analyze "discrete geographic areas". The EAs facilitate improved analysis of cumulative impacts. All of the geographic areas analyzed in these EAs have "confirmation wells" establishing commercial quantities of oil and gas. The High Plains District conducted one on one interviews with numerous oil and gas operators to determine likely development over the next five years. Despite almost a full year effort, it was not possible for industry to identify areas "ripe" for full field development. The Converse County EAs are an appropriate approach to evaluating and disclosing impacts on broad scale, exploratory development projects.</p> <p>The process initiated by the Casper Field Office to analyze and disclose impacts from these proposals is in full compliance with Washington Office guidance. Specifically:</p> <p>BLM WO Instruction Memorandum No. 2012-146 Instructs Field Offices to follow the Section 390 guidance outlined in the NEPA Handbook. Appendix 2 of the NEPA handbook provides guidance on the use of The Energy Policy Act (P.L. 109-58) categorical exclusions (CX) for activities whose purpose is for exploration or development of oil or gas:</p> <p><b><i>3. Drilling an oil or gas well within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed drilling as a reasonably foreseeable activity, so long as such plan or document was approved within five years prior to the date of spudding the well.</i></b></p>	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>regulations implementing NEPA direct that “tiering” is appropriate only when an agency uses an EIS as its base document:</p> <p>Tiering is appropriate when the sequence of statements or analyses is: (a) From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site- specific statement or analysis; (b) From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation).</p> <p>40 C.F.R. § 1508.28. Even though these EAs are lengthy, that characteristic does not replace an EIS. As the federal courts have noted, “girth is not a measure of the analytical soundness of an environmental assessment. No matter how thorough, an EA can never substitute for preparation of an EIS, if the proposed action could significantly affect the environment.” Anderson v. Evans, 314 F.3d (9th Cir. 2002) (emphasis added). Approval of several hundred wells is clearly a significant action that warrants the preparation of an EIS.</p>	<p><b>WO Instruction Memorandum No. 2012-146 Attachment 2:</b></p> <p>3. The third exclusion applies to <i>"Drilling an oil or gas well within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed drilling as a reasonably foreseeable activity, so long as such plan or document was approved within five (5) years prior to the date of spudding the well. "</i></p> <p>This may become one of the most commonly used CX established by the Act. The proposed well must be within a developed oil and gas field. <b>A developed field is any field in which a "confirmation well" has been completed. Normally, this is after the third well in a field.</b> The pending APD must also be within the reasonably foreseeable development scenario (RFD)</p> <p><b>WO Instruction Memorandum No. 2012-146 Attachment 3:</b></p> <p>Use of Multiple Well Environmental Assessments (EA) and Environmental Impact Statements (EIS) for Oil, Gas, and Geothermal Development Effective immediately, all BLM Offices will address multiple proposed activities (e.g. multiple wells within a field) through a single NEPA action, whenever practical.</p> <p>There are several ways to apply this policy so that it will not delay the operators who choose not to submit APDs or related rights-of-way in a logical grouping such as a POD. <b>One option is to complete an analysis as an "umbrella" EA/EIS that analyzes "x" number of wells that will potentially be submitted over the next few years within an oil or gas field. The EA/EIS could set a time and number limit for future APDs.</b></p> <p><b>Another option is to select a discrete geographic area and conduct the analysis specific to that area, estimating an anticipated (but not yet submitted) number of APDs. In these cases, additional NEPA documentation for current or future APDs and related rights-of-way within the scope of the EA/EIS analysis should rarely be necessary.</b></p> <p>These multiple-well or POD EAs/EISs facilitate improved analysis of cumulative impacts. It is also easier to compare the impact reduction from best management practices when applied over a larger area for multiple wells.</p>	
PRBRC-2	PRBRC	<p>Additionally, there is a need for all of these closely related project proposals to be considered in a single EIS. NEPA regulations require “cumulative” or “similar” actions to be considered in a single environmental review document, particularly when actions “have similarities that provide a basis for evaluating their</p>	<p>Separating the actions into three separate project areas, were due to distinct groupings provided by industry and to avoid including very large areas of land and resources that at the time of the project development did not have industry interest.</p>	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		environmental consequences together, such as common timing or geography.”40 C.F.R. § 1508.25. Federal Courts have affirmed this requirement: “In many ways, a programmatic EIS is superior to a limited, [project]-specific EIS because it examines an entire policy initiative rather than performing a piecemeal analysis within the structure of a single agency action.” Northcoast Env’tl. Ctr. v. Glickman, 136 F.3d 660, 668 (9th Cir. 1998), quoting Ass’n of Pub. Agency Customers v. Bonneville Power Administration, 126 F.3d 1158, 1184 (9th Cir. 1997); See also Kleppe v. Sierra Club, 427 U.S. 390, 410 (U.S. 1976) (where several proposals that “will have cumulative or synergistic environmental impact upon a region are pending concurrently before an agency, their environmental consequences must be considered together”). By separating the projects into three separate EAs, BLM is prevented from carrying out proper consideration of the cumulative and synergistic impacts created by the approval of all of the projects.	<p>Proper consideration of the cumulative impacts of each project was included in each document under Section 4.2 cumulative impacts and under Section 4.3 the combined cumulative impacts, respectively.</p> <p>Chapter 4 has analysis of the incremental effect of the alternatives for each project area when added to the past and present and reasonably foreseeable future actions, as required by NEPA. In addition to the project area specific cumulative impacts, a combined cumulative impacts analysis was performed to account for the incremental effects of the combined total of all the alternatives for the three project areas when added to the combined past and present and reasonably foreseeable future actions to show a combined cumulative impact of all three and was represented as Table 4.4 located in Chapter 4 of each EA.</p> <p>This approach was purposefully done to avoid a piecemeal analysis. A combined cumulative impact analysis satisfies the synergistic environmental impact upon a region, where the environmental consequences are considered together.</p>	
PRBRC-3	PRBRC	BLM should prepare a single EIS for all three projects, preferably with a RMP amendment that specifically addresses deep horizontal oil development in the Casper Field Office area.	<p>The exploratory drilling described in the three EA’s are accounted for within the analysis in the CFO RMP. The wells and associated surface disturbance are within the projections of the current RMP and impacts of those were part of that analysis. The three converse county EAs were tiered to the CFO RMP so the BLM would not have to repeat the analysis contained in the FEIS.</p> <p>Deep horizontal wells are included in the analysis contained in the RMP, however they are categorized as wells 15,000 feet or over in depth.</p>	All 3 EAs
PRBRC-4	PRBRC	<p>General comments regarding omissions and the failure to disclose or fully analyze the following impacts in the Converse County EAs</p> <p>1. No disclosure or analysis of Socio-economic Impacts</p> <p>The Converse County area is experiencing a boom in permitting and drilling of deep horizontal oil wells. However, the socio-economic impacts of this type of boom are not analyzed in the referenced EAs. The socio-economic impacts of oil and gas development are extensive and well documented in many communities. Regarding the proposed development please address the following socio-economic impacts and questions:</p> <ul style="list-style-type: none"><li>What are the expected volumes of truck traffic for drilling, fracking and production and the anticipated impacts to county roads and state highways?</li></ul>	<p>The Socio-economic impacts analyzed in the CFO RMP were identified as being primarily related to oil and gas and coal related development within Natrona and Converse counties. The analysis discusses Social Conditions, such as impacts on population, housing and community services, and custom, culture and social trends as well as Economic Conditions such as impacts on regional earnings and output, employment, and tax revenue.</p> <p>As stated in the FEIS the pace of development was assumed at a relatively constant rate for the purposes of the RMP analysis. The rate of development presented in the alternatives of the three Converse County EAs is consistent with the rate the Casper FO has permitted APDs in the past couple of years. Just as the wells presented in the alternatives in the three Converse County EAs are within the projections of exploration wells as stated in the Reasonably Foreseeable Development Scenario (RFD) and used in the analysis of the CFO RMP.</p>	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>What is the projected economic cost for road and highway maintenance from the increased truck traffic and road use to the counties and state?</p> <ul style="list-style-type: none"><li>What are the emergency service demands and the economic impacts to sheriff, police, state highway patrol, local court system, and local ambulance and hospital services from the increased oil drilling activity in the area?</li></ul> <p>Recent research and reports from Sanford University’s Rural West Initiative has the following: “The Bakken oil boom in western North Dakota has put a tremendous strain on the rural region’s small hospitals. A declining, older population and a rapidly expanding younger, uninsured population; a major overload on emergency facilities, accompanied by skyrocketing bad debt; nurse and staff recruitment has become much more difficult due to high housing prices and high competitive wages in the oil patch; and physician recruitment, always a problem for rural areas, has gotten worse as needs soar.”</p> <ul style="list-style-type: none"><li>What are the impacts of increased drug and alcohol abuse, domestic violence and prostitution and the economic and social impacts to the local community?</li><li>What are the potential or anticipated impacts to housing and the resulting socio- economic impacts to the county, local residents and individuals on fixed incomes?</li><li>What are the potential or anticipated impacts to local small businesses and employers?</li></ul> <p>For more details, please see the link to Sanford University Rural West Initiative regarding a series of articles and research on impacts from the Bakken oil boom at: <a href="http://www.stanford.edu/group/ruralwest/cgi-bin/drupal/">http://www.stanford.edu/group/ruralwest/cgi-bin/drupal/</a></p> <p>Also find the attachment to the comments concerning a compilation of newspaper articles regarding oil and gas boom impacts in Wyoming and North Dakota.</p>	<p>The comparison to the Bakken oil boom in western North Dakota is an inaccurate representation, as that compares the impacts of full field development to the impacts from exploratory drilling, which can differ drastically in both the density and the pace of development, resulting in related impacts but disparate in severity. As stated in the FEIS, “... depending on forces other than BLM management actions that impact the pace of development, there could be short term increases in demand for community services as a result of new jobs and increased population. However, local and state tax revenues collected from energy production could help mitigate short-term increases in demand for services, since tax revenues help to pay for community services.” (FEIS, Vol. 1, page 4-283)</p>	
PRBRC-5	PRBRC	<p>2. No Disclosure or Analysis of Contaminated Fracking Water or Produced Water Disposal</p> <p>The EA provides little to no disclosure or analysis of the total volumes of contaminated fracking water that will need to be disposed of and what specific</p>	<p>The BLM complies with all applicable Federal, State and local laws, including but not limited to Onshore Oil and Gas Order No. 7, Disposal of Produced Water.</p> <p>Due to the exploratory nature proposed within the EA’s with multiple operators drilling into multiple formations, the specific quantities of the flowback water from hydraulic</p>	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>options are available for disposal and the impacts of those facilities. Please disclose and address the following:</p> <ul style="list-style-type: none"><li>• What commercial oilfield waste disposal (COWDS) or evaporation pond facilities are available for receiving fracking water or produced water in the area?</li><li>• Please describe, disclose and address the migratory bird treaty issues facing these facilities and past problems with the death of birds and wildlife in these facilities and soil and water contamination.</li><li>• What are the volumes of fracking wastewater and produced water that will need to be trucked or piped to facilities?</li><li>• Please describe and disclose the location and number of injection wells that can receive contaminated produced water or fracking water and the status of those injection wells.</li></ul> <p>For more information regarding the impacts of these facilities please see the attachments regarding Fish and Wildlife Service investigations and ongoing EPA enforcement. We have also attached a recent investigation from Pro-Publica regarding concerns about deep injection wells.</p> <p>In addition, the recent GAO report noted the following concerns regarding fracking fluid and produced water impacts that should be analyzed in disclosed:</p> <p>The produced water and fracturing fluids returned during the flowback process contain a wide range of contaminants and pose a risk to water quality, if not properly managed.</p> <p>Most of the contaminants occur naturally, but some are added through the process of drilling and hydraulic fracturing. In January 2012, we reported that the range of contaminants found in produced water can include,</p> <ul style="list-style-type: none"><li>• salts, which include chlorides, bromides, and sulfides of calcium, magnesium, and sodium;</li><li>• metals, which include barium, manganese, iron, and strontium, among others;</li><li>• oil, grease, and dissolved organics, which include benzene and toluene, among others;</li><li>• NORM; and</li><li>• production chemicals, which may include friction reducers to help with water</li></ul>	<p>fracturing and produced water from drilling are unknown at this time. Some operators have expressed plans to reuse the flowback water on subsequent wells and others have expressed plans for disposal at authorized facilities. At the APD stage the specifics of each action will be identified and appropriate mitigation measures will be applied and Conditions of Approval (COAs) will be attached, if approved.</p> <p>Table 2.2 lists the function of additives typically present in fracturing fluid, as does Appendix A Powder River Basin Deep Operations Technical Support Document.</p> <p>As stated at the very end of Chapter 4, “The [Wyoming State Engineers Office] SEO water permits define the types of beneficial use, the area of water use, and the quantity of water allowed for use. Water supply needs for oil and gas development, including fracturing, are considered short-term or temporary in nature. Hydraulic Fracturing: A Wyoming Energy Forum (2012). In the RFD, hydraulic fracturing was discussed as a typical completion technique.</p> <p>“Wyoming has regulated well stimulation since the 1950s and was the first state to implement rules for hydraulic fracturing in 2010. Wyoming’s rules cover four key areas: 1) the protection of groundwater and the identification of permitted water supply wells within a quarter-mile of the drilling and spacing unit or WOGGC-approved drilling units; 2) clarification of requirements for well integrity, casing setting depths, casing design and cementing properties; 3) requirements for disclosure of well stimulation fluid (frac fluid) chemicals additives, compounds and concentrations or rates; and 4) requirements for the handling of flowback water.” Hydraulic Fracturing: A Wyoming Energy Forum (2012).</p> <p>In addition to Wyoming’s rules for hydraulic fracturing the BMPs and resource specific mitigation measures for surface disturbing activities, highly erosive soils, water wells, springs, or artesian and flowing wells, and Class I and II Waters are consistent with the ROD/RMP and is not anticipated to exceed the surface and groundwater impacts analyzed in the Casper RMP FEIS.</p> <p>The BLM approves and permits oil and gas development consistent with all appropriate federal, state, and local laws.</p>	

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>flow, biocides to prevent growth of microorganisms, and additives to prevent corrosion, among others.</p> <p>At high levels, exposure to some of the contaminants in produced water could adversely affect human health and the environment. For example, in January 2012, we reported that, according to EPA, a potential human health risk from exposure to high levels of barium is increased blood pressure. Operators must transport or store produced water prior to disposal.</p> <p>According to a 2012 University of Texas report, produced water temporarily stored in tanks (see fig. 12) or impoundments prior to treatment or disposal may be a source of leaks or spills, if not properly managed. The risk of a leak or spill is particularly a concern for surface impoundments as improper liners can tear, and impoundments can overflow. From an environmental standpoint, research indicates that elevated levels of salts can inhibit crop growth by hindering a plant’s ability to absorb water from the soil. Additionally, exposure to elevated levels of metals and production chemicals, such as biocides, can contribute to increased mortality among livestock and wildlife.</p> <p>For example, according to state regulators in North Dakota, in 2010 and 2011, impoundments overflowed during the spring melt season because operators did not move fluids from the impoundments—which were to be used for temporary storage—to a proper disposal site before the spring thaw. GAO-12-732 Shale Oil and Gas Development pages 41 to 43 (footnotes excluded here)</p>		
PRBRC-6	PRBRC	<p>3. No disclosure or analysis of reclamation costs or bonding requirements to ensure plugging and reclamation of wells. Please disclose and address the following:</p> <ul style="list-style-type: none"><li>• What is the estimated cost of plugging and reclaiming these wells?</li><li>• What bonding is required by BLM to ensure plugging and reclamation of the proposed wells?</li><li>• How will BLM ensure the wells are properly plugged and reclaimed?</li><li>• Does BLM have an inventory of old orphaned unplugged and unreclaimed wells in the area? If so, please provide information regarding the mechanical integrity of those wells and the cost and plans for plugging and reclamation.</li></ul>	<p>Per Oil and Gas On Shore Order No. 1</p> <p>5. Bonding:</p> <p>a. Most bonding needs for oil and gas operations on Federal leases are discussed in 43 CFR subpart 3104. The operator must obtain a bond in its own name as principal, or a bond in the name of the lessee or sublessee. If the operator uses the lessee or sublessee’s bond, the operator must furnish a rider (consent of surety and principal) that includes the operator under the coverage of the bond. The operator must specify on the APD, Form 3160–3, the type of bond and bond number under which the operations will be conducted.</p> <p>Under the regulations at 43 CFR 3104.5 and 36 CFR 228.109, the BLM or the FS may require additional bond coverage for specific APDs. Other factors that the BLM or the FS may consider include:</p> <ul style="list-style-type: none"><li>▪ History of previous violations;</li><li>▪ Location and depth of wells;</li><li>▪ The total number of wells involved;</li></ul>	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
			<ul style="list-style-type: none"><li>▪ The age and production capability of the field; and</li><li>▪ Unique environmental issues.</li></ul> <p>These bonds may be in addition to any statewide, nationwide, or separate lease bond already applicable to the lease. In determining the bond amount, the BLM may consider impacts of activities on both Federal and non-Federal lands required to develop the lease that impact lands, waters, and other resources off the lease. Separate bonds may be required for associated Rights-of-Way and/or Special Use Authorizations that authorize activities not covered by the approved APD.</p> <p>b. On Federal leases, operators may request a phased release of an Individual lease bond. The BLM will grant this reduction after reclamation of some portion of the lease only if the operator:</p> <ul style="list-style-type: none"><li>▪ Has satisfied the terms and conditions in the plan for surface reclamation for that particular operation; and</li><li>▪ No longer has any down-hole liability.</li></ul> <p>c. If appropriate, the BLM may reduce the bond in the amount requested by the operator or appropriate Surface Managing Agency. The FS also may reduce bonds it requires (but not the BLM-required bonds). The BLM and the FS will base the amount of the bond reduction on a calculation of the sum that is sufficient to cover the remaining operations (including royalty payments) and abandonment (including reclamation) as authorized by the Surface Use Plan of Operations.</p>	
PRBRC-7	PRBRC	<p>4. No disclosure or analysis of potential health impacts and risks resulting from oil and gas drilling and development.</p> <ul style="list-style-type: none"><li>• Please disclose and discuss the specific activities in shale oil development in these proposed EAs that can pose health risks and impacts.</li></ul> <p>The General Accounting Office’s (GAO) recent publication contains detailed research regarding findings that oil and gas development pose inherent environmental and public health risks. The following comment is taken from the recent GAO report.</p> <p>Oil and gas development, whether conventional or shale oil and gas, pose inherent environmental and public health risks, but the extent of these risks associated with shale oil and gas development is unknown, in part, because the</p>	<p>Public Health and Safety Sections are included in Chapters 3 and 4 in each EA. Specifically, public health and safety will be addressed in operator-specific Spill Prevention, Control, and Countermeasure (SPCC) plans and above ground storage tanks (ASTs), as mandated by both federal and state regulations through the U.S. Environmental Protection Agency (EPA) and Wyoming Department of Environmental Quality (WDEQ). As well as, installation of casing to protect groundwater resources, best management practices, mitigation, and site-specific resource protection measures as conditions of approval identified throughout Chapter 4.</p> <p>In addition, each operator will have an emergency / contingency plan that addresses public health and safety in the event of an accident or unforeseen circumstance warranting immediate response.</p> <p>Minor edits of the Air Resources section in the EAs were performed in accordance with</p>	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>studies GAO reviewed do not generally take into account the potential long-term, cumulative effects. For example, according to a number of studies and publications GAO reviewed, shale oil and gas development poses risks to air quality, generally as the result of (1) engine exhaust from increased truck traffic, (2) emissions from diesel-powered pumps used to power equipment, (3) gas that is flared (burned) or vented (released directly into the atmosphere) for operational reasons, and (4) unintentional emissions of pollutants from faulty equipment or impoundments--temporary storage areas. Similarly, a number of studies and publications GAO reviewed indicate that shale oil and gas development poses risks to water quality from contamination of surface water and groundwater as a result of erosion from ground disturbances, spills and releases of chemicals and other fluids, or underground migration of gases and chemicals. For example, tanks storing toxic chemicals or hoses and pipes used to convey wastes to the tanks could leak, or impoundments containing wastes could overflow as a result of extensive rainfall.</p> <p>According to the New York Department of Environmental Conservation's 2011 Supplemental Generic Environmental Impact Statement, spilled, leaked, or released chemicals or wastes could flow to a surface water body or infiltrate the ground, reaching and contaminating subsurface soils and aquifers. In addition, shale oil and gas development poses a risk to land resources and wildlife habitat as a result of constructing, operating, and maintaining the infrastructure necessary to develop oil and gas; using toxic chemicals; and injecting fluids underground. However, the extent of these risks is unknown. Further, the extent and severity of environmental and public health risks identified in the studies and publications GAO reviewed may vary significantly across shale basins and also within basins because of location- and process-specific factors, including the location and rate of development; geological characteristics, such as permeability, thickness, and porosity of the formations; climatic conditions; business practices; and regulatory and enforcement activities. <a href="http://www.gao.gov/products/GAO-12-732">http://www.gao.gov/products/GAO-12-732</a></p> <ul style="list-style-type: none"><li>• The EA needs to disclose and address the fact that there are potential health impacts from increased truck traffic, flaring operations and the use of silica sand in fracking operations.</li></ul> <p>Again, the recent GAO report notes the following: Construction of the well pad, access road, and other drilling facilities requires substantial truck traffic, which degrades air quality. According to a 2008 National</p>	<p>direction from the BLM WY State Office Staff to reflect updated 2011 information. See the Air Resources Sections for the modifications. Table 3.2 Air Quality Monitoring Sites Within the High Plains DO was updated and Table 3.3 Air Quality Conditions was replaced in its entirety.</p> <p>According to the Report for the Powder River Basin Coal Review Cumulative Air Quality Effects for 2015, prepared by ENSR Corporation, indicate concentrations by pollutant compared to NAAQS, showing exceedences for PM10 and PM2.5. The exceedances were in Campbell County near Wright, WY and attributable to coal. 3A report (Oct. 2008).</p> <p>Table 2-1 shows emissions for 2015 by source group. Conventional oil and gas is broken out, but on a production basis (billion cubic feet), not on an emissions basis (tons per year of pollutant). Figure 3-1 represents a bar graph that shows modeled concentrations for each pollutant compared to the NAAQS, and broken out by source. The “Non-coal” category includes conventional oil and gas, however non-coal contributions are very minor for PM10 and PM2.5, and the oil and gas contribution would be even less. In Appendix C, Tables 2-1 and 3-1 display the modeled concentrations by source category. For non-coal, which includes conventional oil and gas, the contributions are very minor compared to all sources. For example, for Wyoming near-field 2015 high production, the 24-hr PM10 is 512 ug/m3 for all sources, of which 3.66 ug/m3 comes from non-coal (within which is conventional oil and gas). According to Update of Task 3A Report for the Powder River Basin Coal Review Cumulative Air Quality Effects for 2015, prepared by ENSR Corporation; 3A report (Oct. 2008).</p>	



Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>Park Service report, an average well, with multistage fracturing, can require 320 to 1,365 truckloads to transport the water, chemicals, sand, and other equipment—including heavy machinery like bulldozers and graders—needed for drilling and fracturing. The increased traffic creates a risk to air quality as engine exhaust that contains air pollutants such as nitrogen oxides and particulate matter that affect public health and the environment are released into the atmosphere. Air quality may also be degraded as fleets of trucks traveling on newly graded or unpaved roads increase the amount of dust released into the air—which can contribute to the formation of regional haze.</p> <p>In addition to the dust, silica sand (see fig. 11)—commonly used as proppant in the hydraulic fracturing process—may pose a risk to human health, if not properly handled. According to a federal researcher from the Department of Health and Human Services, uncontained sand particles and dust pose threats to workers at hydraulic fracturing well sites. The official stated that particles from the sand, if not properly contained by dust control mechanisms, can lodge in the lungs and potentially cause silicosis. Page 32 GAO-12-732 Shale Oil and Gas Development (footnotes in report excluded here)</p> <ul style="list-style-type: none"><li>• What specific WDEQ modeling indicates that the air quality is not likely to exceed any limits specified by the Clean Air Act in the near future?</li></ul> <p>The EAs state, “The counties that lie within the jurisdictional boundaries of the BLM High Plains District Office (DO) (Natrona, Converse, Platte, Goshen, Niobrara, Weston, Crook, Campbell, Sheridan, and Johnson) are classified as in attainment of all state and national ambient air quality standards as defined in the CAA. Modeling conducted to date by the WDEQ does not indicate that air quality is likely to exceed any limits specified by the CAA in the near future.”</p> <p>The WDEQ has informed Powder River Basin Resource Council that they do not conduct any modeling of oil and gas production sites.</p> <ul style="list-style-type: none"><li>• How can BLM make the above statement in the EAS based on the known impacts of oil and gas development causing an increase in ozone levels and particulate matter?</li></ul>		

Comment #	Organization/ Commenter	Comment	BLM Response	Document
PRBRC-8	PRBRC	<p>5. Failure to fully disclose and analyze the potential impacts to water quality and quantity.</p> <ul style="list-style-type: none"><li>Please disclose the threat of water quality contamination from fracturing operations especially regarding the hazards of inadequate casing, migration of contaminants through fractured rock and potential contamination from inadequate handling of drill cuttings.</li></ul> <p>See GAO research and comments below: Drill cuttings, if improperly managed, also pose a risk to water quality. Drill cuttings brought to the surface during oil and gas development may contain naturally occurring radioactive materials (NORM), along with other decay elements (radium-226 and radium-228), according to an industry report presented at the Society of Petroleum Engineers Annual Technical Conference and Exhibition.</p> <p>According to the report, drill cuttings are stored and transported through steel pipes and tanks—which the radiation cannot penetrate. However, improper transport and handling of drill cuttings could result in water contamination. For example, NORM concentrations can build up in pipes and tanks, if not properly disposed, and the general public or water could come into contact with them, according to an EPA fact sheet. GAO-12-732 Shale Oil and Gas Development, page 40-41</p> <ul style="list-style-type: none"><li>Please disclose and discuss the potential contamination the can occur from improper casing and cementing and detail specifically what BLM is proposing to require to address and reduce the possibility of this happening.</li></ul> <p>GAO research and comments: Improper casing and cementing. A well that is not properly isolated through proper casing and cementing could allow gas or other fluids to contaminate aquifers as a result of inadequate depth of casing, Underground migration can occur as a result of improper casing and cementing of the wellbore as well as the intersection of induced fractures with natural fractures, faults, or improperly plugged dry or abandoned wells. Moreover, there are concerns that induced fractures can grow over time and intersect with drinking water aquifers. Specifically: inadequate cement in the annular space around the surface casing, and ineffective cement that cracks or breaks down under the stress of high pressures. For example, according to a 2008 report by the Ohio Department of</p>	<p>As stated at the very end of Chapter 4, “The [Wyoming State Engineers Office] SEO water permits define the types of beneficial use, the area of water use, and the quantity of water allowed for use. Water supply needs for oil and gas development, including fracturing, are considered short-term or temporary in nature. Hydraulic Fracturing: A Wyoming Energy Forum (2012). In the RFD, hydraulic fracturing was discussed as a typical completion technique.</p> <p>“Wyoming has regulated well stimulation since the 1950s and was the first state to implement rules for hydraulic fracturing in 2010. Wyoming’s rules cover four key areas: 1) the protection of groundwater and the identification of permitted water supply wells within a quarter-mile of the drilling and spacing unit or WOGGC-approved drilling units; 2) clarification of requirements for well integrity, casing setting depths, casing design and cementing properties; 3) requirements for disclosure of well stimulation fluid (frac fluid) chemicals additives, compounds and concentrations or rates; and 4) requirements for the handling of flowback water.” Hydraulic Fracturing: A Wyoming Energy Forum (2012).</p> <p>In addition to Wyoming’s rules for hydraulic fracturing the BMPs and resource specific mitigation measures for surface disturbing activities, highly erosive soils, water wells, springs, or artesian and flowing wells, and Class I and II Waters are consistent with the ROD/RMP and is not anticipated to exceed the surface and groundwater impacts analyzed in the Casper RMP FEIS.</p> <p>The BLM approves and permits oil and gas development consistent with all appropriate federal, state, and local laws.</p> <p><u>Other Resources Available:</u></p> <p><b><i>Onshore Oil and Gas Order No. 2</i></b> <i>Drilling Operations on Federal and Indian Oil and Gas Leases</i></p> <p><b><i>I Introductions</i></b></p> <p><b>(A)Authority</b> “... Specific authority for the provisions contained in this Order is found at: 3162.3-1 Drilling Applications and Plans; 3162.3-4 Well Abandonment; 3162.4-1 Well Records and Reports; 3162.4-2 Samples, Tests, and Surveys; 3162.5-1 Environmental Obligations; 3162.5-2 Control of Wells; 3162.5-2(a) Drilling Wells; 3162.5-3 Safety Precautions; and Subpart 3163 Noncompliance, Assessments, and Penalties.</p>	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>Natural Resources, a gas well in Bainbridge, Ohio, was not properly isolated because of faulty sealing, allowing natural gas to build up in the space around the production casing and migrate upward over about 30 days into the local aquifer and infiltrating drinking water wells.</p> <p>Methane can occur naturally in shallow bedrock and unconsolidated sediments and has been known to naturally seep to the surface and contaminate water supplies, including water wells. Methane is a colorless, odorless gas and is generally considered nontoxic, but there could be an explosive hazard if gas is present in significant volumes and the water well is not properly vented.</p> <p>The risk of contamination from improper casing and cementing is not unique to the development of shale formations. Casing and cementing practices also apply to conventional oil and gas development. However, wells that are hydraulically fractured have some unique aspects. For example, hydraulically fractured wells are commonly exposed to higher pressures than wells that are not hydraulically fractured. In addition, hydraulically fractured wells are exposed to high pressures over a longer period of time as fracturing is conducted in multiple stages, and wells may be refractured multiple times—primarily to extend the economic life of the well when production declines significantly or falls below the estimated reservoir potential. GAO-12-732 Shale Oil and Gas Development, page 45.</p> <ul style="list-style-type: none"><li>Please discuss and disclose the potential for groundwater contamination from natural fractures, faults and abandoned wells in the area of these proposed EAs. Again the referenced GAO report states the following:</li></ul> <p>Natural fractures, faults, and abandoned wells. If shale oil and gas development activities result in connections being established with natural fractures, faults, or improperly plugged dry or abandoned wells, a pathway for gas or contaminants to migrate underground could be created—posing a risk to water quality. These connections could be established through either induced fractures intersecting directly with natural fractures, faults, or improperly plugged dry or abandoned wells or as a result of improper casing and cementing that allow gas or other contaminants to make such connections. In 2011, the New York State Department of Environmental Conservation reported that operators generally avoid development around known faults because natural faults could allow gas to escape, which reduces the optimal recovery of gas and the economic viability of a well. However, data on subsurface conditions in some areas are limited. Several studies we reviewed report that some states are unaware of the location</p>	<p><b>(B) Purpose</b> This Order details the Bureau's uniform national standards for the minimum levels of performance expected from lessees and operators when conducting drilling operations on Federal and Indian lands (except Osage Tribe) and for abandonment immediately following drilling. The purpose also is to identify the enforcement actions that will result when violations of the minimum standards are found, and when those violations are not abated in a timely manner.”</p> <p><b>III Requirements</b> <b>(B) Casing and Cementing Requirements</b> The proposed casing and cementing programs shall be conducted as approved to protect and/or isolate all usable water zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all relevant factors, including: presence/absence of hydrocarbons; fracture gradients; usable water zones; formation pressures; lost circulation zones; other minerals; or other unusual characteristics. All indications of usable water shall be reported.</p> <p><b>1. Minimum Standards and Enforcement Provisions for Casing and Cementing</b> <a href="http://www.blm.gov/style/medialib/blm/wy/programs/energy/og/ogdocs.Par.43912.File.dat/onshoreorder2.pdf">http://www.blm.gov/style/medialib/blm/wy/programs/energy/og/ogdocs.Par.43912.File.dat/onshoreorder2.pdf</a></p>	

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>or condition of many old wells. As a result, operators may not be fully aware of the location of abandoned wells and natural fractures or faults. GAO-12-732 Shale Oil and Gas Development page 46</p> <ul style="list-style-type: none"><li>Please analyze and disclose in more detail the projected water quantity impacts to groundwater and surface water in the local area.</li></ul> <p>The BLM attempts to provide some analysis of water quantity requirements for drilling the proposed projects but attempts to downplay the volumes of water required. Please address the following questions:</p> <ul style="list-style-type: none"><li>How many times will the wells be hydraulically fractured?</li><li>Is the water used for drilling and fracking operations available for future use or consumed and removed from system?</li><li>Where are the water supplies coming from in the area for drilling and fracking and what is the status of the aquifer?</li></ul> <p>As noted in the GAO report: “The key issue for water quantity is whether the total amount of water consumed for the development of shale oil and gas will result in a significant long-term loss of water resources within a region, according to a 2012 University of Texas study. This is because water used in shale oil and gas development is largely a consumptive use and can be permanently removed from the hydrologic cycle, according to EPA and Interior officials.”</p>		
PRBRC-9	PRBRC	<p>6. Failure to fully disclose, describe and analyze the impacts to split estate landowners regarding the process for development of federal minerals underlying private property.</p> <ul style="list-style-type: none"><li>What is the process required by BLM and or industry to develop federal minerals on split estate surface?</li><li>How are landowners able to be involved in and compensated for development on their private surface?</li></ul>	<p>In split estate situations, the surface rights and subsurface rights (such as the rights to develop minerals) for a piece of land are owned by different parties. In these situations, mineral rights are considered the dominant estate, meaning they take precedence over other rights associated with the property, including those associated with owning the surface. However, the mineral owner must show due regard for the interests of the surface estate owner and occupy only those portions of the surface that are reasonably necessary to develop the mineral estate.</p> <p>The BLM’s split estate policy only applies to situations where the surface rights are in private ownership and the rights to development of the mineral resources are publicly held and managed by the Federal government. In the Energy Policy Act of 2005, Congress ordered a report reviewing current policies and practices that the BLM uses in managing oil and natural gas resources in split estate situations. Congress directed the</p>	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
			<p>BLM to consult with affected property owners, representatives of the oil and gas industry, and other interested parties while completing the review to consider how best to facilitate reasonable access for Federal oil and gas activities and minimize impacts to privately owned surface. The BLM transmitted this report to Congress in December of 2006.</p> <p><b>Onshore Oil and Gas Order No. 1 – Split Estate Requirements</b> Onshore Oil and Gas Order Number 1 lays out the requirements necessary for the approval of any proposed oil and gas development on those leases. When it was modified in 2007, Onshore Order No. 1 gave private surface owners additional rights. For more information about the rights, responsibilities, and opportunities afforded the BLM, the oil and gas lessee/operator, and the surface owner under Onshore Oil and Gas Order No. 1, please click on the following link: <a href="http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/Onshore_Order_no1.htm">www.blm.gov/wo/st/en/prog/energy/oil_and_gas/Onshore_Order_no1.htm</a></p> <p><b>Split Estate and Land Management Policy</b> The BLM manages the public lands, including the Federal mineral estate, to enhance the quality of life for present and future generations of Americans, under a mandate of multiple use as described in the <a href="#">Federal Land Policy and Management Act</a>. The <a href="#">Mineral Leasing Act</a> guides the land use planning, leasing, bonding, operations and reclamation associated with all development of Federal oil and natural gas resources. Various laws granted land patents to private individuals but reserved the mineral rights to the Federal Government. The BLM must comply with the provisions of the laws under which the surface was patented. However, many of those laws do not identify the rights of the surface owner in split estate mineral development situations. To better define the rights of the private surface owner, the BLM revised the Onshore Oil and Gas Order Number 1 and issued the Oil and Gas Gold Book in 2007.</p> <p>For more information about the rights, responsibilities, and opportunities afforded the BLM, oil and gas lessee/operator, and the surface owner, please view the following brochure. The brochure may also be available in your local BLM office. <b>Split Estate Brochure: Rights, Responsibilities, and Opportunities</b>   <a href="#">PDF</a>   <a href="#">Word</a></p> <p>For additional References see: Energy Policy Act, Section 1835 - Split Estate Gold Book text on Split Estate (2007) Washington Office (WO) IM 2003-131 Split Estate</p>	

Comment #	Organization/ Commenter	Comment	BLM Response	Document
			WO IM 2007-021 Split Estate Leasing and Planning	<a href="#">PDF</a>   <a href="#">Word</a>
PRBRC-10	PRBRC	<p>7. Failure to accurately describe or analyze the no action alternative.</p> <ul style="list-style-type: none"><li>How is the no action alternative influenced by federal units, spacing orders or pooling agreements?</li><li>Under what scenario, given existing federal units, spacing orders or pooling agreements, are the 140 proposed wells pads in the no action alternative an actual reality or viable alternative?</li></ul>	<p><b>Per WOGCC Rules and Regulations; Chapter 3. Section 2. Location of Wells / Drilling and Spacing Units (All Lands Except Tribal). (f)</b> The following conditions apply to any <a href="#">horizontal well</a> as defined in Chapter 1, Section 2(y): <b>(v)</b> A temporary six hundred forty (640) acre spacing unit, consisting of the governmental section in which the horizontal well is located, is established for the orderly development of the anticipated pool; WOGCC website: <a href="http://wogcc.state.wy.us/wogcchelp/commission.html">http://wogcc.state.wy.us/wogcchelp/commission.html</a></p> <p>Of the leases that are not held by production and make up the No Action Alternatives within the three documents, the average lease size is:</p> <p>Spearhead Ranch average lease size is 681 acres; Highland Loop Road average lease size is 860 acres; and East Converse average lease size is 716 acres.</p> <p>Average lease size for each of the three project areas is consistent with one well per lease at 1 per 640 spacing.</p>	All 3 EAs
PRBRC-11	PRBRC	<p>8. Failure to disclose or analyze the total volumes and impacts of flaring natural gas.</p> <ul style="list-style-type: none"><li>What are the total projected volumes of natural gas that will be flared under the projected development?</li><li>What is the total value of the natural gas and lost royalties from natural gas that will be flared?</li></ul>	<p>Flaring and venting of Gas is authorized under certain circumstances. Typically it is authorized for a determined amount of time or up to a certain production level of gas, unless authorized by the appropriate State regulatory agency or with the prior authorization, approval, ratification, or acceptance of the Supervisor, as explained in <i>Notice to Lessees and Operators of Onshore Federal and Indian Oil and Gas Leases</i> (NTL-4A) <a href="#">Royalty or Compensation for Oil and Gas Lost</a></p> <p>As production is established the companies would likely construct gathering systems, which would decrease the flaring and the amount of traffic.</p>	All 3 EAs
PRBRC-12	PRBRC	<p>9. Failure to fully disclose or analyze the impacts and to sage grouse and their habitat.</p> <ul style="list-style-type: none"><li>Within the project areas what is the available suitable breeding, nesting and winter habitat for sage grouse?</li><li>How is BLM sponsored research and studies on the impacts of oil and gas development on sage grouse that was conducted by Dr. Naugle and his team analyzed and included in these developments?</li><li>How is the pending BLM sage grouse RMP factored into or related to</li></ul>	<p>Suitable breeding, nesting and winter habitat for Sage-grouse has not fully been delineated at this time. At the time of APD processing all habitats will be fully delineated and appropriate COAs will be applied as outlined in Ch. 4 of each EA.</p> <p>In each of the 3 EA areas there is less than 1% Sage-grouse Core Area. Impacts to Sage-grouse Core Areas would be negligible in each of the 3 areas.</p> <p>The BLM Sage-grouse RMP amendment is in still in the process of being developed. A draft has not been made public and any reference to the RMP amendment within these EA's would be premature.</p>	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		this analysis?	<p>The Wyoming Game and Fish Department commented on these EA’s and made the following comment for all three EA’s:</p> <p><i>“We appreciate the EA addressing the need to complete a Density and Disturbance Calculation, prior to development with sage grouse core areas. We have no additional terrestrial wildlife concerns pertaining to this EA.”</i></p> <p>The research in question refers to the National Technical Team Report titled “A Report on National Greater Sage-grouse Conservation Measures”. This report is being fully analyzed in the pending RMP Sage-grouse Amendment.</p>	
PRBRC-13	PRBRC	<p>10. Failure to fully disclose or analyze the ability of the Casper BLM to adequately staff inspection and enforcement of the proposed oil drilling and production projects.</p> <ul style="list-style-type: none"><li>• What is the Casper BLM’s staffing capability to inspect and enforce drilling permits, fracking operations, production facilities and reclamation?</li><li>• Please describe the BLM’s inspection and enforcement process regarding oil drilling and production and royalty collection.</li></ul>	<p>The BLM Casper Field Office is in compliance with the BLM’s National Oil and Gas Inspection and Enforcement Program. The types of Inspections are: Production, Drilling, Abandonment, Workover, Environmental, Records Verification, Undesirable Event, and Alleged Theft.</p> <p>For more information the Washington BLM Office has developed a website for the oil and gas Inspection and Enforcement (I&amp;E) Program. This website provides an overview of the I&amp;E program, access to copies of blank inspection forms used to document field inspections, regulations, national Onshore Oil and Gas Orders (OOGO’s), Notices to Lessees (NTL’s) and other information about the program. See <a href="http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/Energy_Facts_Enforcement.html">http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/Energy_Facts_Enforcement.html</a></p> <p>Of the inspections reported by State Offices compared for nine BLM State Offices, Wyoming topped the list with more than 11,800 inspections in Fiscal Year 2011. The New Mexico State Office handled more than 9,500 inspections. In both states the majority of inspections were environmental inspections. (See BLM National website at link above for chart).</p> <p>The past three years the BLM Casper Field Office staff have met or exceeded their annual workload targets approved by the WY State Office for conducting fluid mineral inspections.</p>	All 3 EAs
AHW-1	Alliance for Historic Wyoming (AHW)	As this project goes forward, we ask that AHW be considered an interested party for all consultations under Section 106 of the National Historic Preservation Act (NHPA) as amended, and implementing regulations 36 CFR 800.2(c)(5) and 800.3(f)(3). You may use the above listed address, phone number and email address to contact us as part of the Section 106 consultations. As you know, NHPA’s Section 106 process recognizes that “the views of the public are essential to informed Federal decision making …” Therefore, agencies are required to	<p>Based on this request, the BLM will include AHW as an interested party for all appropriate and specific undertakings arising from this EA as BLM complies with Section 106 of the National Historic Preservation Act, as amended.</p> <p>General NHPA compliance steps, including when Interested Parties will be consulted, can be found in the Heritage and Visual Resources section of Chapter 4- Environmental Effects. At the APD stage the BLM will analyze each undertaking and, when</p>	All 3 EAs/ (Specifically for Highland Loop Road & Spearhead Ranch)

Converse County EAs Comment Response and Errata

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		“seek and consider the views of the public in a manner that reflects the nature and complexity of the undertaking and its effects on historic properties, [and] the likely interest of the public in the effects on historic properties....” 36 CFR § 800.2(d)(1) Likewise, the Historic Sites Act of 1935 states that: “It is a national policy to preserve for public use historic sites, buildings, and objects of national significance for their inspiration and benefit of the people of the United States.” Each of these acts reiterate the high value our nation places on its historic and prehistoric resources.	appropriate, involve all interested parties.	
AHW-2	AHW	We are specifically concerned about the rather limited analysis you seem to have done on the nature and extent of the historic and cultural resources in the areas to be affected by your proposed undertakings. It appears as though you have simply identified the historic trail resources to be affected but have provided little in-depth consideration to that analysis. We remain deeply concerned that the BLM generally pays too little attention to the nature of these historic resources. In determining areas of potential effects, the BLM draws artificial boundaries across these historic trails, boundaries that fit the necessary strictures of the project under consideration but which have absolutely no relationship to reality when it comes to the nature of the historic trails. These trails are a historic resource of national significance precisely because they were the route that many emigrants, merchants and military personnel followed in their push to extend the boundaries of the United States. The simple act of putting artificial boundaries around these trails for the convenience of examining specific projects results in its own degradation of the essential contiguous nature of these linear resources. We encourage you to take a larger view of these national historic trails and to recognize that whenever a segment of the trail routes is degraded in any way, the entire length of the trail resource has suffered a blow. The analogy we like to use is that of a ten-foot rope. When you cut that rope into ten one-foot segments and lay them side-by-side, you can still claim to have a ten-foot rope but it will never again function in the same way. The same is true of the National Historic Trails and we believe that the continued, incremental degradation of these resources has and continues to result in a much greater loss to the public than the BLM has yet acknowledged.	The BLM does not have specific locations for all of the undertakings that will occur under this EA. The BLM must rely on BMP’s (best management practices) and management actions developed through our recent RMP (2007) and reiterated in the mitigation measures outlined in Chapter 4 for Heritage and Visual Resources. At this time, the BLM can only outline general BMP’s and mitigation measures because we do not know where the specific undertakings will occur. However, at the APD stage, each undertaking will be analyzed and its effects on any significant heritage and visual resource will be addressed. This analysis also takes into account the cumulative effects to these same resources.	All 3 EAs/ (Specifically for Highland Loop Road & Spearhead Ranch)
AHW-3	AHW	Another concern that we have with all of these projects affecting the historic trail systems is that the effect of these projects on the historic landscapes is not being adequately addressed. Frankly, the more we deal with these issues, the more we have begun to question whether Section 106 of NHPA is adequate to address the actual impacts on the resources that the general public so prizes. As we know, Section 106 and NHPA is only capable of addressing adverse effects to properties that are eligible for listing on the National Register of Historic Places. But what is	(see comment and response above)  To reiterate, at the APD stage, there is an inventory conducted to determine if any significant heritage or visual resources will be impacted. This analysis included the specific action as well as its cumulative impacts to those same resources. Upon completion of inventories, the BLM then applies BMP’s and develops any mitigation measures necessary to minimize impacts to these resources.	All 3 EAs/ (Specifically for Highland Loop Road & Spearhead Ranch)



Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>happening in many parts of our state is that the cultural foundation of our “cowboy state” is being eaten up by energy extraction. Open vistas can never be found eligible for the NRHP but nearly every Wyoming citizen would tell you that these are fundamental to their sense of Wyoming. We believe these unconsidered impacts to our state’s heritage resources can and will have serious socio-economic impacts down the road. Our state’s economy is heavily dependent on tourism, which ranks second only to energy production. If we sacrifice the qualities that draw in tourists – our cowboy culture, our open spaces, our unobstructed views, our clean air, our ability to transport visitors back to another era – we risk losing this vital sector of our economy. Since none of these important cultural attributes are eligible for the NRHP, we strongly encourage you to consider whether your automatic deferral to the Section 106 process to handle any and all concerns related to historic and cultural resources sufficiently addresses the impacts you are required to analyze under the NEPA process.</p>		
AHW-4	AHW	<p>As I am sure you know, Congress declared in NHPA that “the historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people; [and] the preservation of this irreplaceable heritage is in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, economic, and energy benefits will be maintained and enriched for future generations of Americans.” 16 U.S.C. 470(b)(2) and (b)(4) Moreover, NHPA states that: “It shall be the policy of the Federal Government...to foster conditions under which our modern society and our prehistoric and historic resources can exist in productive harmony and fulfill the social, economic, and other requirements of present and future generations; [and] encourage the public and private preservation and utilization of all usable elements of the Nation’s historic built environment.” 16 U.S.C. 470-1 (1) and (5) These findings place a high burden on our country’s land management agencies to ensure that all possible steps are taken to ensure the protection of our historic and cultural resources for future generations. This includes the possibility that there may be undefined historic landscapes, eligible for the NRHP, within the designated project areas. It has been our experience that the BLM has been woefully inadequate when it comes to evaluating the potential for rural historic landscape designations, especially along the National Historic Trails. Within the EAs in question, we found no evidence that you have even considered the possibility of potential historic landscapes within the designated project areas. We believe this is a major oversight on your part and would like to see you hire qualified landscape analysts to resurvey the area to see whether or not there might be</p>	<p>Because the EA (all 3 proposed) is only for an exploratory development project, extensive on the ground inventories were not conducted. However, these values (including historic landscapes), if present, will be identified and evaluated at the APD stage when more extensive efforts are conducted. Any significant values identified at the APD stage will then be managed through our BMP’s and management practices developed within our recent RMP and reiterated in this EA. Currently, there are no undefined or significant landscapes on record other than those already disclosed in chapter 3 of this EA.</p>	All 3 EAs

Converse County EAs Comment Response and Errata

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		historic landscapes that need to be considered for additional protection.		
AHW-5	AHW	In addition, AHW believes that no NEPA analysis can be complete or adequate if it doesn't thoroughly examine the impacts that the proposed project, especially if it is a "dirty energy" project, would have on recreational opportunities, including the ability and desire to wander and discover the nation's historic roots, the ability to promote heritage tourism and the potential socio-economic loss if such opportunities are sacrificed. We find no such analysis in these EAs.	Recreational opportunities were not identified as an affected resource during internal scoping, as there are limited opportunities for recreation within the project areas due to the surface ownership pattern and limited access to public lands.  The majority of all three project areas are comprised of private lands (surface estate) with only small, isolated patches of intermingled public lands with limited or no public access available for recreational opportunities.	All 3 EAs
AHW-6	AHW	We would also remind you that, under NHPA, your first obligation in regards to historic resources is avoidance of these resources and, only when that is not possible, the minimization of impacts. Mitigation as a solution is only acceptable once these other two options have proven impossible.	This is currently stated in Chapter 4 under mitigation measures for all three EAs.	All 3 EAs
AHW-7	AHW	We would also encourage you to ensure that extensive and effective outreach be made to the affected tribes as early as possible so that they might have the opportunity to do extensive on-the-ground surveys to identify landscape-wide cultural sites of importance to them. As you may be aware, it is often the case that the prehistoric and cultural features identified by SHPOs do not come close to being as inclusive as the sites identified by THPOs and tribal elders. Tribes often have not had the opportunity to do extensive ground surveys for decades or longer. Only through this kind of examination can they adequately contribute to the process of protecting their sacred sites in accordance with Executive Order 13007. We would also remind you that EO 13007 defines a "sacred site" as "any specific, discrete, narrowly delineated location" that is "identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion...." (emphasis added) This secondary requirement of seeking identification by authoritative Indian individuals places a heavy responsibility on federal agencies to cast a wide net among the affected tribes to ensure that all potential sacred sites are identified. While we understand and appreciate that this level of consultation can be time-consuming and complicated, we believe that the need to protect these irreplaceable resources makes this process more than worthwhile.	Tribal consultations were an integral part in the development of our recent RMP. If appropriate, further tribal consultation will occur at the APD stage based on more extensive on-the-ground inventories.	All 3 EAs
AHW-8	AHW	Recently, we have also become increasingly concerned about the need for improved in-house training for heavy equipment field operators. In the last few years, we have witnessed several instances where field operators have failed to recognize existing remnants of the historic emigrant trails and, as a result, sections of those irreplaceable historic trails have been lost forever. While better marking of these trails can improve this situation, we believe that it is especially important that the field operators understand their obligations under both NHPA	At the APD stage, each undertaking is subject to an inventory to identify any heritage resources present within the area of potential effect (or APE) as a first step. These resources are then evaluated and, if necessary, special stipulations will be applied as a condition of approval for each action. One of our tools includes monitoring of construction activities by a <b><u>qualified permitted specialist</u></b> . These types of monitors insure the situation you describe does not occur.	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		and the Archaeological Resources Protection Act (ARPA). NHPA requires that: “Each Federal agency that is responsible for the protection of historic resources, including archaeological resources...shall ensure” [16 U.S.C. 470h-4(a)] that “All actions taken by employees or contractors of such agency shall meet professional standards under regulations developed by the Secretary...and the appropriate professional societies of the disciplines involved, specifically archaeology, architecture, conservation, history, landscape architecture, and planning.” [16 U.S.C. 470h-4(a)(1)]		
AHW-9	AHW	ARPA, likewise, gives strong guidance on these issues, noting: “Archaeological resources on public lands and Indian lands are an accessible and irreplaceable part of the Nation’s heritage, and these resources are increasingly endangered because of their commercial attractiveness.” [16 U.S.C. 470aa] According to 16 U.S.C. 470ee(a), no person may alter or deface any archaeological resource located on public or Indian lands unless pursuant to a legally issued permit, with the exception of arrowheads located on the surface. Any person who knowingly violates this law faces penalties defined in 16 U.S.C. 470ee(d). Together, these provisions from NHPA and ARPA make it clear that contractors working on any federal undertaking that may encounter cultural resources needs to receive in-depth training regarding the significance of those resources and the contractor’s responsibilities under the law. Unfortunately, we found nothing about this in your discussion of mitigation or best management practices. We hope you will consider adding such requirements to your further NEPA analysis. If, at any time, you feel that AHW could be of assistance in explaining the importance of these resources to the contractors and equipment operators, please feel free to contact us.	<p>A standard cultural resources stipulation is attached as a Condition of Approval (COA) for each federal undertaking at the APD stage. We have added this stipulation in Chapter 4, of all the EAs under the mitigation measures section for cultural resources’, see below for the added language.</p> <p>“All BLM permitted activities in the study area will contain the following standard cultural stipulation: The permittee is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the Authorized Officer of the BLM Casper Field Office. Within five working days the Authorized Officer will inform the operator as to: (1) whether the materials appear eligible for the National Register of Historic Places; (2) the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and, (3) a timeframe for the Authorized Officer to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the finds of the Authorized Officer are correct and that mitigation is appropriate. The Authorized Officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer that the required mitigation has been completed, the operator will then be allowed to resume construction measures.”</p> <p>The standard Paleontology Stipulation was already included in Chapter 4, all of the EAs under mitigation measures for paleontology.</p>	All 3 EAs
AHW-10	AHW	Finally, we want to emphasize the importance of developing a comprehensive monitoring and cultural resource discovery plan for these projects. A wide variety of these plans are in existence, some better than others. However, it is vital that a comprehensive plan be available for review by the public and that it be thoroughly vetted by those who have requested interested party status under Section 106. We believe it should also be prominently attached to future NEPA	As stated in a previous response, these EAs are for <b>exploratory</b> oil and gas projects. At this point of development <b>and</b> based on existing data, there is no evidence to indicate that a “comprehensive monitoring and cultural resource discovery plan” is necessary at this time. If circumstances and existing data change then the BLM will consider the use of such a plan as part of our compliance with all applicable laws.	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		documents. Only with an accepted and well understood comprehensive monitoring and cultural resource discovery plan can you ensure that any unexpected discoveries encountered during the course of this project are handled properly. This is especially true whenever you are working around archaeological sites tied to Native Americans or the old emigrant trails because of the strong potential for uncovering human remains in these areas. This is necessary not only to ensure proper compliance with NAGPRA but also because Wyoming currently lacks a comprehensive state statute regarding the discovery of human remains.		
USFWS-1	U.S. Fish and Wildlife Service (USFWS)	<p>Thank you for your electronic correspondence regarding the availability of the East Converse, Highland Loop Road, and Spearhead Ranch Environmental Assessments. The Bureau of Land Management, Casper Field Office (BLM) has announced the availability of the above Environmental Assessments (EAs) for proposed oil and gas development within Converse and a small portion of Niobrara Counties, Wyoming. The East Converse EA analyzes up to 72 wells on 18 well pads; the Highland Loop Road EA analyzes up to 148 wells on 37 well pads; and the Spearhead Ranch EA analyzes up to 224 wells on 56 well pads.</p> <p>In response to your request to review the three final EAs, the U.S. Fish and Wildlife Service (Service) is providing you with comments on (1) threatened, endangered and candidate species, (2) migratory birds, and (3) wetlands and riparian areas. The Service provides comments regarding oil and gas development in accordance with the Memorandum of Understanding (MOU) implementing Section 365 of the Energy Policy Act of 2005 (Public Law 109-58) and National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4321 et seq. The Service provides recommendations for protective measures for threatened and endangered species in accordance with the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Protective measures for migratory birds are provided in accordance with the Migratory Bird Treaty Act (MBTA), 16 U.S.C. 703 and the Bald and Golden Eagle Protection Act (BGEPA), 16 U.S.C. 668. Wetlands are afforded protection under Executive Orders 11990 (wetland protection) and 11988 (floodplain management), as well as section 404 of the Clean Water Act. Other fish and wildlife resources are considered under the Fish and Wildlife Coordination Act and the Fish and Wildlife Act of 1956, as amended, 70 Stat. 1119, 16 U.S.C.742a-742j.</p>	Thank you for your comments.	All 3 EAs
USFWS-2	USFWS	We support the BLM's approach to maximize the number of wells per well pad, and the use of common access routes and corridor roads, pipelines and utility lines. Doing so will avoid and minimize the effects of oil and gas development to threatened, endangered, candidate species, and migratory birds, and will reduce	Thank you for your comments.	All 3 EAs

Converse County EAs Comment Response and Errata

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		fragmentation of the habitats upon which these species depend.		
USFWS-3	USFWS	<p>All three EAs include a determination of "may affect, likely to adversely affect" for water depletions from the North Platte River system and downstream Platte River species. The Highland Loop Road EA includes "may affect, but not likely to adversely affect" determinations for Ute ladies-tresses orchid (<i>Spiranthes diluvialis</i>), blowout penstemon (<i>Penstemon aydenii</i>) and Prebles meadow jumping mouse (<i>Zapus hudsonius prebleii</i>). The Spearhead Ranch EA includes "may affect, but not likely to adversely affect" determinations for Ute ladies-tresses orchid and blowout penstemon.</p> <p>As currently written, the three EAs do not provide enough information on the direct, indirect and cumulative effect of the project to support your effects determinations. For each of the threatened and endangered species addressed, the three EAs should provide additional information on: (1) the possible presence or absence of the species within the project areas; (2) the potential direct, indirect and cumulative effects of the projects; and (3) what measures will be used to avoid or minimize adverse effects should a threatened or endangered species be discovered within the action area.</p> <p>We also recommend the three EAs clearly identify all measures the BLM will implement to avoid and minimize the unintentional take of all migratory birds.</p>	At this time the locations of the wells, access road, pipeline, powerlines etc. are not exactly known. At the time of APD processing a site specific evaluation will be analyzed for each location. All appropriate surveys for T&E species and habitats will be conducted for each location. If it is determined that a proposed action will have an effect on a T&E species than section 7 consultation will be conducted. A biological assessment will be submitted to the FWS for review and if needed further NEPA analysis will be performed.	All 3 EAs
USFWS-4	USFWS	<p>In order to avoid and minimize the negative effects of oil and gas development to threatened, endangered, candidate species and the habitats upon which these species depend, we recommend incorporating the conservation measures and terms and conditions contained in the BLM's statewide programmatic biological assessments, biological evaluations and the Service's respective biological opinions into the three EAs and their respective biological assessments (BAs). We recommend this information be included in the project EAs and BAs prior to initiation of section 7 consultation with our office.</p> <p>We encourage the BLM to have projects, such as these EAs, vetted through the Level 1 process, which includes early interagency communication and collaboration on information needs and analysis. Projects that have gone through the level 1 process have resulted in significantly streamlined section 7 consultations.</p>	At this time the locations of the wells, access road, pipeline, powerlines etc. are not exactly known. At the time of APD processing a site specific evaluation will be analyzed for each location. All appropriate surveys for T&E species and habitats will be conducted for each location. If it is determined that a proposed action will have an effect on a T&E species than section 7 consultation will be conducted. A biological assessment will be submitted to the FWS for review and if needed further NEPA analysis will be performed.	All 3 EAs
USFWS-5	USFWS	<p><b>COMMENTS COMMON TO ALL THREE EAS</b></p> <p>Alternatives Considered in Detail: All three of the EAs state, "the BLM cannot</p>	At this time the locations of the wells, access road, pipeline, powerlines etc. are not exactly known. At the time of APD processing a site specific evaluation will be analyzed for each location. All appropriate surveys for T&E species and habitats will be	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>determine whether a lease will be drilled, explored or developed. In addition, the BLM cannot reasonably determine where companies will propose to develop wells on a given lease before the lessee files an NOS, APD, or a plan of development (POD)." However, the BLM's NEPA documents state the BLM has already received both notices of staking (NOSs) and applications for permits to drill (APDs) within the three analysis areas.</p> <p>We recommend all three EAs identify potential well locations, both NOSs and APDs, currently on file with the BLM and include an analysis of the direct, indirect and cumulative effects of construction, operation and maintenance and eventual abandonment and reclamation of proposed oil and gas development to threatened, endangered, candidate species and migratory birds and the habitats upon which these species depend.</p>	<p>conducted for each location. If it is determined that a proposed action will have an effect on a T&amp;E species than section 7 consultation will be conducted. A biological assessment will be submitted to the FWS for review and if needed further NEPA analysis will be performed.</p>	
USFWS-6	USFWS	<p><u>Chapter 3. Migratory Bird Species:</u></p> <p>The three EAs state, "BLM must include migratory birds in every NEPA analysis of actions that have potential to affect these bird species of concern to fulfill obligations under the MBTA." We recommend that you also include direct, indirect and cumulative effects of the federal action to migratory birds as required for NEPA and in accordance with Executive Order 13186.</p>	<p>At this time the locations of the wells, access road, pipeline, powerlines etc. are not exactly known. At the time of APD processing a site specific evaluation will be analyzed for each location.</p>	All 3 EAs
USFWS-7	USFWS	<p><u>Chapter 4, Threatened and Endangered Species:</u></p> <p>All three EAs state, "If water is obtained from outside the project area that is within a hydrologically connected sub-basin and exceeds 0.1 acre-feet, then consultation with the FWS will be required." Project elements that could be associated with depletions to the Platte River system include, but are not limited to, ponds (detention/recreation/irrigation storage/stock watering), lakes (recreation/irrigation storage/municipal storage/power generation), reservoirs (recreation/irrigation storage/municipal storage/power generation), created or enhanced wetlands, hydrostatic testing of pipelines, wells, diversion structures, dust abatement, and water treatment facilities. Any actions that may result in water depletions to the Platte River system should be identified. Specific guidance for section 7 consultations for depletions to the Platte River basin under the Platte River Recovery Implementation Program is available online at <a href="http://www.fws.gov/platteriver">http://www.fws.gov/platteriver</a>.</p> <p>The website includes the following information for Wyoming Water Users: (1) Guidance for Water-Related Projects in Wyoming, (2) Wyoming Depletions Plan, (3) Template Biological Assessment, (4) Wyoming State Engineer's Office, (5)</p>	<p>At the time of APD processing the water source location and the amount of water will be provided. If the criteria in the Platte River Implementation Program are met then section 7 consultation will take place.</p>	All 3 EAs

Converse County EAs Comment Response and Errata

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>Printable maps (.pdf files) of "not hydrologically connected" areas (from WY State Engineer's Office).</p> <p>The BLM should coordinate with the Wyoming State Engineers office on the amount and source of water for these projects, and the need for section 7 consultation with the Service on depletions from the Platte River Basin.</p>		
USFWS-8	USFWS	<p><u>Chapter 4, Threatened and Endangered Species - Ute ladies-tresses:</u></p> <p>All three EAs state there is no documented potentially suitable habitat for Ute ladies-tresses orchid located within the project area. However, Table 3.7 in each of the EAs identifies wetland acreage or springs, potential habitat for Ute ladies-tresses, present within the analysis areas.</p> <p>Each of the three EAs should include information on: (1) the possible presence or absence of the species within the project area; (2) the potential direct, indirect and cumulative effects of the project on the species and suitable habitat; and (3) what measures will be used to avoid or minimize adverse effects should a threatened or endangered species be discovered within the action area.</p>	Suitable habitat models for Ute ladies-tresses were utilized from Wyoming Natural Diversity Database (WYNDD). Site specific surveys will be conducted for each proposed action. If suitable habitat will be impacted then species specific surveys will also be conducted. Section 7 consultation will be performed if effects will occur.	All 3 EAs
USFWS-9	USFWS	<p><u>Chapter 4, Threatened, Endangered, and Special Status Species-Mitigation:</u></p> <p>The three EAs state, "surface development or use is prohibited (NSO) on all designated critical habitat for threatened or endangered species. Areas known or suspected to contain essential habitat for threatened and endangered species and/or special status species will be subject to a CSU restriction, requiring the proponent to conduct inventories or studies to verify the presence or absence of special status species."</p> <p>If wildlife surveys of the action area indicate the presence of potential habitat for species listed under the Act, we recommend the BLM consult on potential effects prior to permitting or implementation of the project. Should pre-construction surveys identify the presence of a listed species and consultation with the Service has not occurred, the project may be delayed. Section 7(d) of the Act requires that the action agency and permit or license applicant shall not make any irreversible or irretrievable commitment of resources, which would preclude the formulation of reasonable and prudent alternatives, until consultation on listed species is completed.</p>	At this time the locations of the wells, access road, pipeline, powerlines etc. are not exactly known. At the time of APD processing a site specific evaluation will be analyzed for each location. All appropriate surveys for T&E species and habitats will be conducted for each location. If it is determined that a proposed action will have an effect on a T&E species than section 7 consultation will be conducted. A biological assessment will be submitted to the FWS for review and if needed further NEPA analysis will be performed. If further mitigation measures are required they will be incorporated at that time.	All 3 EAs
USFWS-10	USFWS	<p><u>Wildlife, Special Status Species, and Threatened and Endangered Species:</u></p> <p>Under the section on Migratory Birds Species, all three EAs state, "the BLM-</p>	At this time the locations of the wells, access road, pipeline, powerlines etc. are not exactly known. At the time of APD processing a site specific evaluation will be analyzed for each location. Migratory bird mitigation measures will be considered at that time.	All 3 EAs

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>USFWS MOU (2010) promotes the conservation of migratory birds, as directed through Executive Order 13186 (Federal Register V. 66, No. 11). BLM must include migratory birds in every NEPA analysis of actions that have potential to affect migratory bird species of concern to fulfill obligations under the Migratory Bird Treaty Act (MBTA)."</p> <p>We recommend this paragraph be revised since Executive Order (EO) 13186 outlines a wide variety of actions that Federal agencies should undertake to protect migratory birds. The EO is not limited to ensuring that the environmental impacts of Federal actions are properly evaluated. This is just one of the responsibilities Federal agencies have under EO 13186.</p> <p>The above paragraph in Chapter 3 (Affected Environment) in each of the EAs addressing EO 13186 is incomplete. There are 15 major points contained in the EO whereas only one is currently identified in the EAs. We have listed below the five recommendations (correctly listed according to number from EO 13186) that are directly applicable to the three BLM projects.</p> <p>We recommend the three EAs clearly identify all measures the BLM will implement to avoid and minimize the unintentional take of all migratory birds, in addition to raptors, when conducting agency actions:</p> <p>(1) Support the conservation intent of the migratory bird conventions by integrating bird conservation principles, measures, and practices into agency activities and by avoiding or minimizing, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions;</p> <p>(2) Restore and enhance the habitat of migratory birds, as practicable;</p> <p>(3) Prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable,</p> <p>(8) Minimize the intentional take of species of concern by: (i) delineating standards and procedures for such take; and (ii) developing procedures for the review and evaluation of take actions. With respect to intentional take, the MOU shall be consistent with the appropriate sections of 50 C.F.R. parts 10, 21, and 22; and</p> <p>(9) Identify where unintentional take reasonably attributable to agency actions is having, or is likely to have, a measurable negative effect on migratory bird populations, focusing first on species of concern, priority habitats, and key risk factors. With respect to those actions so identified, the agency shall develop and use principles, standards, and practices that will lessen the amount of</p>		



Comment #	Organization/ Commenter	Comment	BLM Response	Document
		unintentional take, developing any such conservation efforts in cooperation with the Service. These principles, standards, and practices shall be regularly evaluated and revised to ensure that they are effective in lessening the detrimental effect of agency actions on migratory bird populations. The agency also shall inventory and monitor bird habitat and populations within the agency's capabilities and authorities to the extent feasible to facilitate decisions about the need for, and effectiveness of, conservation efforts.		
USFWS-11	USFWS	<p><u>BLM Sensitive Species Section - Bald Eagles:</u></p> <p>All three EAs state, "the bald eagle was delisted from its threatened status under the federal Endangered Species Act and in losing federal status; it is designated as sensitive in Wyoming."</p> <p>While the bald eagle was removed from the list of species protected under the Act, the protections afforded both bald and golden eagles under the MBTA and BGEPA remain in place. We recommend that the following information be added to each of the EAs.</p> <p>The BGEPA protections include provisions not included in the MBTA, such as the protection of unoccupied nests and a prohibition on disturbing eagles. Specifically, under the BGEPA (50 CFR § 22.3) the definition of "take" includes:</p> <p>"Pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, or molest or disturb"</p> <p>The BGEPA defines the term "disturb" in 50 CFR § 22.3, to mean:</p> <p>"to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."</p>	Appropriate mitigation measures for the Bald eagle according to CFO RMP have been incorporated into the all three EA's.	All 3 EAs
USFWS-12	USFWS	<p><b>SPECIFIC COMMENTS - SPEARMAN RANCH EA</b></p> <p><u>Page 46. Threatened and Endangered Species-Ute ladies-tresses:</u></p> <p>The EA states, "There are no documented populations within the project area. In addition, there is no documented potentially suitable habitat located within the project area."</p>	The Spearhead Ranch EA does in fact have 2 known populations for Ute ladies-tresses on public land as well as suitable habitat. This was a misprint and will be corrected in the EA.	Spearhead Ranch

Converse County EAs Comment Response and Errata

Comment #	Organization/ Commenter	Comment	BLM Response	Document
		<p>Based on a review of our records there are at least three known populations of Ute ladies'-tresses orchid on BLM and State lands within the Spearman Ranch analysis area. In addition, there are several other known populations on private surface within the analysis area, and it is likely that other populations of Ute ladies'-tresses orchid exist within the Antelope Creek drainage.</p> <p>The Spearman Ranch EA should identify that there are multiple known populations of Ute ladies'-tresses orchid present within the analysis area. In addition, the EA should identify that there is potentially suitable habitat located within the project area. The EA should analyze the potential direct, indirect and cumulative effects of the project on Ute ladies'-tresses and incorporate conservation measures from the BLM's statewide programmatic biological assessments for this species.</p>		
USFWS-13	USFWS	<p>For our internal tracking purposes, the Service would appreciate notification of any decision made on this project (such as issuance of a permit or signing of a Record of Decision or Decision Memo). Notification can be sent in writing to the letterhead address or by electronic mail to FW6_Federal_Activities_Cheyenne@fws.gov.</p>	Thank you for your comment, when a decision record is issued we will include you on the routing list.	All 3 EAs
CEC-1	Chesapeake Energy Corporation (Chesapeake)	<p>Chesapeake Energy Corporation (Chesapeake) respectfully submits the following comments to the Bureau of Land Management Casper Field Office (CFO) in regards to the three Converse County Environmental Assessments (EA) posted on September 17, 2012 titled Spearhead Ranch, Highland Loop Road, and East Converse EAs. In general, Chesapeake agrees with the Agency Alternative since this alternative has the greatest potential to reduce the number of acres disturbed, miles of access road and pipelines while allowing streamlined permitting and responsible oil and gas development within the EA boundaries.</p>	Thank you for your comments.	All 3 EAs
CEC-2	Chesapeake	<p>Chesapeake understands that all three EAs have an Agency Alternative that considers four wells per drilling pad at an average of 4.21 acres per pad before reclamation. This preferred alternative exemplifies increased energy production utilizing multiple wells per pad at a reduced environmental impact. Chesapeake agrees with BLM that due to unknown production information in this rather unproven play that the number of wells per location should be flexible. It is Chesapeake's understanding, that BLM is not limiting the well number per location to four or the pad size to 4.21 acres as the EAs may imply but used four wells and the disturbance amount as an average per pad. Chesapeake requests the language throughout all three EAs reflect this flexibility such that "minimum of four" wells per pad and "minimum 4.21 acres" are added to better reflect the cumulative impact message.</p>	<p>The following statement was added as a footnote for Table 2.1 Comparison of Alternatives in Chapter 2 of all the EAs.</p> <p>"The values used in this table are assumptions, based on calculated averages. Actual disturbance, well pad size, and number of wells on a pad, may vary based on site-specific topography, distances, and targeted resources. However, the total authorized short and long term disturbances analyzed within this EA would not be exceeded."</p>	All 3 EAs

Converse County EAs Comment Response and Errata

Comment #	Organization/ Commenter	Comment	BLM Response	Document
CEC-3	Chesapeake	Chesapeake also agrees with the BLM that the environmental impact or disturbance areas will continue to be minimized with additional wells utilizing the same access road and pipelines. Chesapeake suggests that BLM track and remove the disturbance on these multiple well pad locations as the reclamation is proven successfully completed. The properly reclaimed disturbance should be credited back to the overall cumulative disturbance to more accurately monitor the Resource Management Plan's disturbance threshold.	<p>The following statement was added under Interim and Final Reclamation at the very end of Chapter 2 of all the EAs.</p> <p>“As a way to monitor and track approved versus actual disturbance and reclamation success, the BLM may require as built shapefiles from operators. Tracking and monitoring reports will be maintained for the project.”</p>	All 3 EAs
CEC-4	Chesapeake	Chesapeake appreciates the BLM CFO's consideration of our comments. Please feel free to contact me at laurie.heath@chk.com or 307-21 5-4848 if you have any questions.	Thank you for your comments.	All 3 EAs
SRC-1	Samson Resources Corporation (SRC)	<p>Samson Resources Company (SRC) would like to thank the BLM for the opportunity to comment on the three released Converse County Environmental Assessments (EAs). SRC holds a significant oil and gas leasehold in Wyoming and has a strong operational presence in Converse County. SRC would like to acknowledge the diligent efforts made to work with operators and PAW to gather information and draft these environmental assessments in a timely manner.</p> <p>SRC supports the Agency Alternative in all three Converse County EAs. The Agency Alternative has the foresight and appropriate corresponding well counts to give operators flexibility to explore and define the resource potential of the Federal leases held within each project boundary. Additionally, the Agency Alternative clearly states how leases will be developed and makes part of the public record industry’s technical support document. The technical support document explains many standard operating procedures utilized by industry during development, which is important for the BLM and the general public to understand.</p> <p>As a member of PAW, SRC supports and incorporates by reference PAW’s comments submitted to the BLM with regard to these EA’s. Thank you for the opportunity to comment.</p>	Thank you for your comments.	All 3 EAs